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ABSTRACT

The computerized data file, the Area Resource File (ARF), was originally used in determining locations of nationwide Health Education Centers (AHEC). It has been more recently employed in general and comparative geographic statistical analysis of health resources in counties throughout the country. This aid contains seven general categories of data: county identification defined by several Federal agencies; demographic (census); economic (households, aid recipients, total personal income, distribution of personal income); training (Schools, enrollment, graduates); health manpower; health facilities (general and special hospitals), and health status (total, infant, and disease mortality, births). It then provides four types of output: basic profile (table 1), shortages (tables 2 and 3), manpower-population ratio (tables 4 and 5) and ranking (table 6). The six tables also illustrate several of the seven categories: the surveys of selected measures of health manpower, facilities, and education by health areas (for Kentucky only), existing and needed optometrists and podiatrists per population base, active non-Federal M.D.'s, D.D.S.'s and their ratio (for Missouri only), the total number of podiatrists, and AHEC health rankings for selected measures of health manpower (for Kentucky only). The ARF form and user documentation are appended. (JB)

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Monographs and Data for Health Resources Planning

THE AREA RESOURCE FILE

A MANPOWER PLANNING AND RESEARCH TOOL

CE 003 383

DHEW Publication No. (HRA) 75-5

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
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PREFACE

The Division of Manpower Intelligence (DMI) of the Bureau of Health Resources Development, Health Resources Administration, has developed a computerized data file that brings together many disparate data elements useful in the analysis of health manpower on a geographic basis. This file, called the Area Resource File (ARF), was originally developed and is being maintained primarily as an analytical tool for DMI and the Bureau of Health Resources Development. However, it has also proved to have many other uses and to be valuable to a wide variety of organizations and individuals concerned with health manpower and resource analysis. This report was prepared in the Manpower Resources and Requirements Branch of the Division of Manpower Intelligence by Wilbert Williams under the supervision of Howard V. Stambler.

TABLE OF CONTENTS

	Page
Introduction	1
Overview of ARF Organization	1
The Structure and Content of ARF	2
County Identification	3
Demographic Data	6
Economic Data	6
Health Manpower Data	6
Hospital Data	7
Training Data	8
Health Status and Vital Statistics Data	8
Basic ARF Output	9

INTRODUCTION

The Division of Manpower Intelligence (DMI) was created in the fall of 1970 to provide the then Bureau of Health Manpower Education (BHME), now the Bureau of Health Resources Development, with a single focal point for health manpower and resource analysis. At that time, the Carnegie Commission on Higher Education had just published its report, Higher Education and the Nation's Health, which called for a program to establish over 100 Area Health Education Centers (AHEC's) in different areas of the Nation. Congress was showing considerable interest in the AHEC concept and, since legislative authority for the program was expected to be assigned to the Bureau of Health Manpower Education, DMI began to prepare analytical tools to assist in an orderly, data-based development of the program. Although the Carnegie Commission's report listed potential locations for these AHEC's, it emphasized that the designated locations were based only upon cursory analysis, and that the final locations should be chosen on the basis of comparable statistical evidence of the need for such centers. As a result, the first major focus of BHME and DMI was to prepare a basis for determining the locations of these AHEC's. This, along with the fact that development of a general purpose area data file had already received a high DMI priority, prompted the commitment of resources to the creation of what is now known as the Area Resource File (ARF).

The Manpower Resources and Requirements Branch of DMI, which was concerned with the collection, development, and interpretation of data on manpower resources and requirements as they relate to the education and training of health manpower, began intensive development of the Area Resource File in the spring of 1971. Although fewer resources were able to be devoted to ARF than had been hoped, work on the file moved ahead rapidly and it became operational in late 1971.

The initial use of the ARF was largely in the identification of the geographic distribution of and the need for educational programs. As time passed, however, the needs of DMI and other users led to its growing use as a tool for general statistical analysis of health resources in specific geographic areas. Although the ultimate value of ARF may very well be in its use as a basis for comparative geographic analysis across area lines and for wide scale, easily accessable manipulation of comparative data, its value as a tool for specific area analysis has become relatively widely recognized. This report was prepared as an aid to current and potential users.

Overview of the ARF Organization

The ARF was originally developed using counties as the base geographic unit. This choice of base unit partially reflected constraints of time for the period of file development. Even without such constraints, however, use of

other geographic bases would not have been feasible or as useful. Very little data are available, for example, for areas smaller than counties (and even that from only once-a-decade Census data). Without extensive data development, such a file based upon sub-county units would have had only very limited usefulness and would have been out-of-date very quickly. On the other hand, basic units larger than the county are too rigid and inflexible in use. Furthermore, county data were generally more current, more often updated, and more readily available. Thus, the decision was made to base the file largely upon county data.

One ARF departure from the standard use of counties as described in Federal Information Processing Standards[1] (FIPS) was the merging of the independent cities of Virginia back into their original counties and the recoding of the independent cities in other States. These independent cities have been created over a number of years and are still in the process of being created. When past data exist only for a composite city-county area, it would have been extremely difficult to break it into its smaller components. Since the concept of the independent city is largely related to fiscal matters, it was believed that the city could reasonably be grouped with the adjoining county for purposes of manpower analysis. In addition, such a grouping would avoid the abandonment of a number of useful data items for counties that were not available for independent cities. A further consideration was the potentially recurrent problem of having to make data base revisions each time fiscal advantages lead to the creation of a new independent city. While this departure from FIPS was regretted, it was deemed essential.

Initially, data for Alaska and Hawaii were entered on a State, rather than on a county level, due to definitional problems. The Hawaii problem has since been resolved and county data for Hawaii will be included in the ARF. Problems with the Alaska data remain, however. Census data is organized by Election Districts in Alaska, with much of the available health manpower data organized by the four Judicial Districts of Alaska. Since the two sets of districts are incompatible, county level data for Alaska has not been incorporated in the ARF.

The Structure and Content of ARF

The Area Resource File's collection of health care resources and supply and socio-economic data include only those data sets available for all counties in the U.S.

These are seven general categories of data in the ARF:

(1) county identification
(2) demographic
(3) economic
(4) training
(5) health manpower
(6) health facilities
(7) health status

The types of data in the seven broad categories are described below, with a detailed listing of data elements of ARF presented in Appendix A, with the user documentation description of the data presented in Appendix B.

County Identification

Although the ARF contains a single basic county identification code, there are a number of other county combination designations in the ARF, which permit a variety of further analyses. The major county identification in the ARF is the Federal Information Processing Standards (FIPS) county codes as described in FIPS Publication No. 6 dated June 15, 1970, and published by the National Bureau of Standards, U.S. Department of Commerce. The specific county codes used in the ARF are also FIPS, although, as indicated earlier, certain independent cities have been recoded and no county codes have been entered for Alaska. County codes for Hawaii will be added in the future. The independent cities of Virginia have been recoded into their original counties because much of the data in the file is by county and thus cannot be separated into county and independent city segments.

There are also several county-group identifiers on the Area Resource File that provide different ways of grouping counties for purposes of analysis, although they are restricted to those which group whole-county units. The county-group identifiers on ARF at present time are: (1) The State Economic Area and Economic Subregion as established by the U.S. Bureau of the Census, U.S. Department of Commerce; (2) The Federal Regions as established by the Office of Management and Budget; (3) FIPS Standard Metropolitan Statistical Areas; (4) Office of Business Economics' Economic Areas; (5) Ranally Major and Minor Trading Areas; and (6) DMI Place Size Codes.

State Economic Areas (SEA's) and Economic Subregions are delineated by the Bureau of the Census and are relatively homogeneous subdivisions of States. They consist of single counties which have similar economic and social characteristics. The boundaries of the SEA's have been drawn in such a manner that each State is divided into a relatively few segments, with each having comparable significant characteristics which serve to distinguish it from adjoining SEA's. In 1970, there were 510 SEA's. These SEA's differ from Standard Metropolitan Statistical Areas (SMSA's) in that every county in the U.S. is a part of an SEA and SEA's do not cross State lines. Similarly, the Economic Subregions are combinations of SEA's. Although these areas cross State lines, they still preserve to a great extent the homogeneous nature of SEA's. There were 121 Economic Subregions in 1970.

Standard Metropolitan Statistical Areas (SMSA's) are the standard FIPS categories as defined by the Bureau of the Budget and published in Census Bureau-OMB publication dated May 1. 1973. Except in the New England States, an SMSA is a county or a group of contiguous counties which contain at least one city of 50,000 population or more, or twin

cities with a combined population of at least 50,000. In addition to the county or counties containing such a city (or cities), contiguous counties are included in an SMSA if, according to certain criteria, they are socially and economically integrated with the central city.

In New England, instead of counties, SMSA's are defined with towns and cities as base units. This was not deemed to be suitable for analytical purposes, since it is based upon areas smaller than counties, and thus the ARF uses metropolitan State Economic Areas instead of SMSA's.

OBE Economic Areas have been designated by the Bureau of Economic Analysis, Regional Economic Division. These economic areas are based on the nodal/functional area concept. That is, to each urban center are attached the surrounding county units in which economic activity is focused directly or indirectly on the nodal center. Each economic area combines the place of residence and place of work of employees as nearly as possible as that there is a minimum of commuting from home to work across economic area boundaries. All counties are included in some economic area.

Federal Regions are delineated by a Federal Assistance Review team composed of representatives from various Federal agencies under the direction of the Office of Management and Budget. These regions were established primarily for the administration of the various Federal programs. There are ten such regions and they are organized as follows:

Region	Member States
I. Boston R.O.	Maine, Vermont, Mass., Conn., R.I., N.H.
II. New York R.O.	N.Y., N.J., Puerto Rico, Virgin Islands
III. Philadelphia R.O.	Penn., Del., D.C., Maryland, Va., W.Va.
IV. Atlanta R.O.	Ala., Fla., Ga., Dy., Miss., N.C., S.C., Tenn.
V. Chicago R.O.	Ill., Ind., Minn., Mich., Ohio, Wisconsin
VI. Dallas R.O.	Arkansas, N.M., Okla., Texas, Louisiana
VII. Kansas City R.O.	Iowa, Kansas, Missouri, Nebraska
VIII. Denver R.O.	Colo., Montana, N.D., S.D., Utah, Wyoming
IX. San Francisco R.O.	Ariz., Calif., Hawaii, Nev., Trust Terr.
X. Seattle R.O.	Alaska, Idaho, Oregon, Washington

Ranally Major and Minor Areas are areas in which code numbers have been assigned to the fifty major trading areas by an alphabetical listing in the "Trading Area Manual, a supplemental to the Ranally Trading Area Map of the United States," copyright 1963 by Rand, McNally and Company.

The Ranally Minor Area Codes were established from a trading area map developed by Rand, McNally and Company. There are 494 such areas, which are indicated by numbers keyed to an alphabetical list at the bottom of their map.

DMI Place Sizes groupings in the ARF, based a two digit code, have been developed by DMI for each county on the ARF. For SMSA counties, this code represents the population of the SMSA in which the county is located. For non-SMSA counties, this code represents the population of the county. These codes have been assigned as follows:

	Place size (1970 Census)	Place size code
SMSA.....	1 million plus	11
SMSA.....	500,000 - 999,000	21
SMSA.....	250,000 - 499,000	31
SMSA.....	100,000 - 249,000	41
SMSA.....	Under 100,000	51

	Non-metropolitan areas (1970 Census)	Place size code
NONMET.....	50,000 plus	2
NONMET.....	25,000 - 49,999	3
NONMET.....	10,000 - 24,999	4
NONMET.....	5,000 - 9,999	5
NONMET.....	Under 5,000	6

Comprehensive Health Planning Areas

DMI has assigned a four digit numerical code to each Comprehensive Health Planning (CHP) area as defined by the U.S. Comprehensive Health Planning Service, although there are a few exceptions for areas that are composed of parts of counties. These CHP areas are listed in DHEW Publication No. (HRA)74-14, 001. The DMI exceptions to these areas are listed in the DMI Area Resource File User's Documentation presented later in this report.

Professional Standards Review Organization Areas

DMI has assigned a four digit numerical code to each proposed Professional Standards Review Organization (PSRO) area as designated by the Secretary, DHEW. These areas were delineated for the purpose of defining geographical areas over which each PSRO, whose function is to monitor the quality of health care, will have jurisdiction. The PSRO areas presently on ARF are those as listed in the Federal Register dated December 20, 1973, with a few exceptions as listed in the DMI Area Resource File User's Documentation.

Demographic Data

The Area Resource File contains a set of demographic data elements selected by DMI as providing the most essential analytical input. These data largely cover county population estimates, classified by a variety of important characteristics. Because of the need to provide comparable data for all counties, most of the data are drawn from the 1970 Decennial Census. A few total population estimates are also provided for earlier Census years.

The list below indicates the specific demographic data elements contained in the ARF for each county:

1970 Census Population--Total Resident Population
1970 Census Total Resident Population by Race (White, Black, and Other)
1970 Census Total Resident Population by Age and Sex
1970 Census Total Resident Urban Population
1960 Census Total Resident Population
1950 Census Total Resident Population
1940 Census Total Resident Population

Economic Data

As with demographic data, the potential amount of economic data that could have been incorporated into the ARF was virtually limitless. In order to provide a manageable file, however, it was necessary to limit the ARF economic data to those elements deemed to be most critical to area health resource analysis. Although there are literally hundreds of other data elements that could have been included, those that have been placed in the file in practice have been found to be among the most analytically valuable for health manpower area analysis. Should time and resources permit, these may be changed or revised in the future.

The economic data elements included in the ARF are listed below:

Total Personal Income from the 1970 Census
Distribution of Personal Income for Families and Unrelated Individuals
Total Personal Income from the 1960 Census
Total Personal Income from the 1950 Census
The Number of Households from the 1970 Census
The Number of Families Receiving Aid to Families with Dependent Children Income According to the Social and Rehabilitation Service

Health Manpower Data

The health manpower data elements contained in the ARF are obviously the most critical of all the elements that would be needed for meaningful analysis. Unfortunately, only limited data on health manpower are available by county, and much of what exists is not current. In most cases, such data are based on earlier surveys conducted of licensed manpower

only. Furthermore, many of these data sets refer, not to active health manpower, but rather to total licensed manpower.

Because of the variety of sources from which this information was drawn and the resulting variety of dates, definitions, and coverage, the health manpower data in ARF should be used with extreme caution, and with continuing explicit reference to the detailed user documentation (presented in Appendix A) which explains the data sources in detail. It is important to note, however, that currently ongoing intensive data collection efforts within HRA, both in the National Center for Health Statistics and the Bureau of Health Resources Development, should provide substantially improved, expanded, and more current manpower data within the next year or so. For example, new data on the number of RN's and Podiatrists are expected to be available shortly.

The health manpower data currently available in the ARF are listed below:

Active Non-Federal M.D.'s for 1940, 1950, 1969, 1970, and 1971
1971 Osteopaths by: Total, Primary Patient Care, Active Non-Federal
Total Dentists for 1968 and Licensed Dentists for 1971
Patient-Care Optometrists for 1968, Licensed Optometrists for 1972, and Active Optometrists for 1968
Active Pharmacists for 1966
Total Podiatrists for 1966
Total Veterinarians for 1967
Active RN's for 1966
Employed LPN's for 1967

Hospital Data

In order to provide meaningful comparative statistics for evaluation of area health resources, the ARF contains a wide variety of hospital data. These include not only gross statistics on the number and type of hospitals, but also selected data on hospital utilization, such as beds, patient days, and services offered.

In many ways, this segment of the file contains perhaps the most complete data set of all the categories and provides a basic capability for many types of analysis. However, as with other data categories, the hospital data are not completely current, although more current data are continuously becoming available.

The hospital data currently in the ARF are listed below:

Number of General Hospitals
Number of Special Hospitals
Distribution of General Hospitals by Number of Beds
Hospital Employment by Type of Hospital for the Following Occupations: M.D.'s, D.D.S.'s, Interns and Residents (M.D.'s and D.D.S.'s), Other Trainees, RN's, LPN's

Number of Outpatient Visits to General Hospitals for 1970
Number of Clinic Outpatient Visits to General Hospitals for 1970
Number of Outpatient Visits to Special Hospitals for 1970
Number of Inpatient Days in General Hospitals for 1970
Number of Outpatient Visits to General Hospitals for 1969
Number of Inpatient Days in General Hospitals for 1969
Distribution of General Hospitals by Types of Service as Listed in the Hospital Guide issue plus some Services from Previous Years
Distribution of General Hospitals by Utilization in 1970
Distribution of General Hospitals by Number of Services Offered in 1970
Total Hospital Expenditures
Number of General Hospitals by Type of Emergency Services

Training Data

Although the ARF was developed with only minimal emphasis on education and training data, this aspect of the file has been closely evaluated by DMI staff with the aim of substantially expanding and updating these data. Currently the file contains data on schools, graduates, and enrollments for a large number of occupations, as well as information on related training, such as residency programs. As the date of publication of this report, the entire training file was being reevaluated and updated. Nevertheless, the training data currently in the file can provide substantial insights into county resource availability, both when viewed by themselves and in conjunction with other data.

The training data on the ARF cover number of schools, enrollments and graduates in medical schools, dental schools, nursing, optometry, pharmacy, podiatry, veterinary medicine, osteopathy, and dental auxiliary.

Health Status and Vital Statistics Data

The final data set contained in the ARF is this small but essential category. The amount of available data of this kind is voluminous, and it was necessary in developing the ARF to select only a few of the most essential major elements for inclusion. As a result, those elements included were generally chosen to reflect only the more generally accepted measures which could be clearly quantified on a county basis and which were believed to be most clearly related to manpower and hospital data. These data now in the ARF have proved to be very useful, although this is not meant to imply that other data elements of this type would not have been equally useful. The data elements on health status and vital statistics are shown below:

Total Mortality
Infant Mortality
Infectious and Parasitic Diseases Mortality
Number of Births in Hospitals
Total Number of Births

In summary, the ARF contains selected sets of data elements in broad categories that were deemed by DMI to be useful in the analysis of area health resources, taking into account the considerations spelled out at earlier points in this discussion. Readers of this report and users of the ARF are cordially invited to make comments and to offer suggestions as to what other data elements and categories might be more useful and which specific data might be added to the file.

Basic ARF Outputs

Since its inception, the Area Resource File has been used largely to provide four basic types of standard output, although a wide variety of other uses can and have been made of it on a number of occasion. The four major outputs are: (1) the Basic ARF Area Profile; (2) the Shortage Output; (3) the Manpower-Population Ratio Output; and (4) the Ranking Profile.

Basic Area Profile from ARF provides a compact data profile of a particular area or set of county-based areas, which serves to bring together in one simple print-out the major data on an area. This profile has proved to be an extremely valuable summary to users, primarily as a starting point for area analysis. (A sample tabulation of the Basic ARF Profile is shown in Table 1.) Such a tabulation can be relatively easily prepared for any county, State, or group of counties, as well as for the OBE areas, Ranally Areas, or SMSA's, described earlier. Not only can the data be provided for the individual counties comprising such groupings, but totals for any of these groupings can also be easily provided.

The Shortage Output reflects an identification of counties or groups of counties that are relatively less well off than others in terms of manpower/population ratios. In this type of standard print-out, ratios of manpower to population are developed on a county basis and than compared to some pre-determined standard, which can be an "ideal" ratio, an "average" ratio or some other pre-determined standard ratio. The comparison provided by the ARF then indicates to what extent a "shortage" or "surplus" exists (as compared with the standard ratio), and what numbers of manpower would be needed to bring the existing ratio in line with that pre-determined standard.

Although such simplified analytical print-outs obviously do not answer all the questions about the relative manpower situation in different areas, they do provide the beginning point on which further analysis and study can be based.

Table 2 provides an example of this type of potential output. In this example, for Kentucky counties, the resident population and number of optometrists are shown, along with the number of optome-

trists that would be needed to meet the various pre-determined standards indicated. In this way, it can be determined whether or not the particular county has an adequate or inadequate supply according to those standards. Table 3 presents similar information for a small group of SMSA's in the field of podiatry.

The Manpower-Population Ratio Output is one major type of useful analytical output from the ARF that presents a standard simple listing of population, manpower, and manpower-population ratios by county or other groupings. Table 4 provides an example of such a print-out, indicating the number of M.D.'s and D.O.'s per 100,000 population in counties in Missouri. Table 5 provides a similar presentation, showing podiatrists per 100,000 population classified by size of SMSA's.

The Ranking Output derives from a ranking program which provides the capability for ranking selected geographic areas (county or otherwise) on the basis of 36 variables or ratios of variables contained in the ARF. In this output, all counties in a State, or all States in the U.S. are ranked numerically in either ascending or descending order. For example, a print-out can be provided which ranks physician/population ratios in each county in the U.S., starting with the lowest ratio in any county and proceeding through all counties to the county with the highest ratio. Another meaningful standard print-out of this type provides, for selected data elements in a State, that State 's numerical ranking vis-a-vis other States in the U.S. Thus, on a single page of output, one can identify how a particular area ranks on each of a number of variables. Table 6 provides an example of such a print-out, in which the State of Kentucky is compared to all other States, with the State's ranking provided for a variety of measures, such as population, rural population, non-white population, nurse/population ratio, residencies, and other measures. Such a tabulation provides at a glance an indication of the relative standing of the State in many critical areas, and can serve as the basis for extended further analysis.

Table 1

05/12/73

SELECTED MEASURES OF HEALTH MANPOWER, FACILITIES, AND EDUCATION, BY HEALTH AREA

STATE: KENTUCKY

NUMBER OF COUNTIES.....	120	POPULATION (000S).....	3215.9
NUMBER SMSA COUNTIES...	8	NUMBER HOUSEHOLDS (000S)...	820.7
TOTAL LAND AREA.....	39858	% RURAL POPULATION	53.0
		POPULATION/SQUARE MILE.....	81
		1970 POP AS % OF 1960 POP..	105.8
		% WHITE...	92.4
		% BLACK...	7.5
		% OTHER...	0.1

SEX-AGE DISTRIBUTION:	TOTAL	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65 & OVER
TOTAL	100.0	8.5	20.3	18.2	11.8	10.9	10.8	9.1	10.5
% MALE	49.0	4.3	10.4	9.3	5.8	5.2	5.2	4.3	4.5
% FEMALE	51.0	4.2	9.9	8.9	6.1	5.6	5.6	4.8	6.0

POPULATION BY COUNTY TYPE AND SIZE:	TOTAL	SMSA COUNTIES--BY SMSA SIZE 1 + MIL.	SMSA COUNTIES--BY SMSA SIZE UNDER 1 MIL.	NON-SMSA COUNTIES--BY SIZE OF LARGEST CITY IN COUNTY OVER 10000	2500-9999	UNDER 2500
NO. COUNTIES	20	3	5	3	29	80
% POPULATION	100.0	7.8	32.2	6.0	22.0	32.0

PERSONAL INCOME ($ MIL.).....	7896.7	AID DEPENDENT CHILDREN POPULATION...	143435
PERSONAL INCOME/CAPITA.....	2455	ADC POP. 100000 TOTAL POPULATION....	4460.2
PERSONAL INCOME/HOUSEHOLD....	9621		
INCOME/CAPITA AS % OF 1960...	185.3		

HOUSEHOLD INCOME LEVELS: % OF HOUSEHOLD	TOTAL	UNDER $3000	$3000-4999	$5000-9999	$10000 & OVER
	100.0	26.1	15.3	35.2	23.5

	MEDICAL SCHOOLS	OSTEOPATHY SCHOOLS	DENTAL SCHOOLS	NURSING (RN) SCHOOLS	NURSING (LPN) SCHOOLS	DENTAL AUXILIARY SCHOOLS
NUMBER	2	0	2	27	24	4
ENROLLMENT	681	0	427	2098	895	94
GRADUATES	152	0	82	501	687	56

NUMBER MEDICAL SCHOOLS (CONTINUING EDUCATION COURSES... 0 PER 100 MDS... 0

NUMBER MEDICAL AUXILIARY SCHOOLS... 38 CAPACITY OF PROGRAM... 523

NUMBER OPTOMETRY SCHOOLS.....	0
NUMBER PHARMACY SCHOOLS.....	1
NUMBER PODIATRY SCHOOLS.....	0
NUMBER VETERINARY SCHOOLS.....	0

NUMBER UNIVERSITIES... 14 NUMBER COLLEGES.. 15 NUMBER JR. COLLEGES.. 8

Table 1 (cont.2) 05/22/73

SELECTED MEASURES OF HEALTH MANPOWER, FACILITIES, AND EDUCATION, BY HEALTH AREA

	TOTAL	PER 100000 POPULATION	PER $100000 INCOME
ACTIVE PHYSICIANS (MD)..	3042	96	0.398
ACTIVE PHYSICIANS (DO)..	24	1	0.003
TOTAL PHYSICIANS.....	3125	97	0.393
TOTAL DENTISTS.....	1249	38	0.158

PER 100 HOSPITALS BEDS

NURSES (RN).....	5664	185	29.8
NURSES (LPN).....	2431	81	13.0
TOTAL NURSES.....	8575	266	42.8

	TOTAL
OPTOMETRISTS.	219
PHARMACISTS..	1380
PODIATRISTS..	68
VETERINARIANS	336

NUMBER GENERAL HOSPITALS... 138
(NUMBER BEDS/HOSPITAL..... 1271)
(NUMBER BEDS/100000 POP... 4271)

NUMBER OTHER HOSPITALS..... 22

DISTRIBUTION OF GENERAL HOSPITALS:

BY NO. BEDS:	TOTAL 108	0-99 64	100-99 22	200-99 8	300-99 8	400 + 6
% UTILIZATION:		0-69% 41	70-79% 20	80-89% 25	90% + 22	

AMA ACCREDITED TRAINING

ALL HOSPITALS

NUMBER OF INTERN PROGRAMS.....	8	NUMBER OF INTERNSHIPS OFFERED...	258
NUMBER OF RESIDENCY PROGRAMS....	11	NUMBER OF RESIDENCIES OFFERED...	232
NUMBER IN FAMILY MEDICINE.....	0	NUMBER OFFERED.....	0
NUMBER IN INTERNAL MEDICINE.....	4	NUMBER OFFERED.....	76
NUMBER IN PEDIATRIC.....	3	NUMBER OFFERED.....	34
NUMBER IN OBS. & GYN.....	3	NUMBER OFFERED.....	23

NUMBER OF GENERAL HOSPITALS WITH GIVEN SERVICES:

INTENSIVE CARE.....	34	ELECTROENCEPHALOGRAPHY.....	27	PSYCHIATRIC-PART. HOSP.....	8
INTENSIVE CORONAS.....	32	PHYSICAL THERAPY.....	54	PSYCHIATRIC-EMERGENCY.....	12
OPEN HEART SURGERY.....	3	OCCUPATIONAL THERAPY.....	8	SOCIAL WORK.....	15
RECOVERY ROOM.....	73	INHALATION THERAPY.....	48	FAMILY PLANNING.....	6
PREMATURE NURSERY.....	48	F-T REG. PHARMACIST.....	51	EXTENDED CARE.....	20
X-RAY THERAPY.....	34	P-T REG. PHARMACIST.....	30	REHABILITATION-INPATIENT...	9
COBALT THERAPY.....	9	DIALYSIS-INPATIENT.....	7	REHABILITATION-OUTPATIENT..	6
RADIUM THERAPY.....	22	DIALYSIS-OUTPATIENT.....	5	HOME CARE.....	13
RADIOISOTOPE THERAPY.....	33	SELF-CARE UNIT.....	8	HOSPITAL AUXILIARY.....	71
HISTOPATHOLOGY LABORATORY..	37	PSYCHIATRIC FOSTER CARE....	0	ORGANIZED OUTPATIENT DEPT..	29
ORGAN BANK.....	2	PSYCHIATRIC-INPATIENT.....	17		
BLOOD BANK.....	61	PSYCHIATRIC-OUTPATIENT.....	12		

DISTRIBUTION OF GENERAL HOSPITALS BY SERVICES OFFERED:

NUMBER OF SERVICES:	0-4 43	5-14 48	15-24 16	25 + 1

LEVEL OF EMERGENCY SERVICE: MAJOR DEPARTMENT.. 16 MINOR DEPARTMENT.. 44 BASIC UNIT..... 42 REFERRAL ONLY.. 1

NUMBER OUTPATIENT VISITS.....	2687273	NUMBER INPATIENT DAYS.....	4064585
OUTPATIENT VISITS/100000 POP.....	83562	INPATIENT DAYS/100000 POP.....	126390
% CHANGE OUTPATIENT VISITS 1969-1970...	13	% CHANGE INPATIENT DAYS 1969-1970.....	-1

GENERAL MORTALITY... 1026 /100000 POP. INFANT MORTALITY... 2.2

Table 1 (cont.3)

5/22/73

SELECTED MEASURES OF HEALTH MANPOWER, FACILITIES, AND EDUCATION, BY HEALTH AREA

LISTING OF THE COUNTIES INCLUDED IN THE HEALTH AREA

COUNTY NAME	STATE	RANALLY NO.	TYPE
ADAIR	KY	24-259	RURAL CO.
ANDERSON	KY	24-249	RURAL CO.
BARREN	KY	24-357	SM. NON-M.
BELL	KY	21-287	SM. NON-M.
BOURBON	KY	24-249	SM. NON-M.
BOYLE	KY	24-249	SM. NON-M.
BREATHITT	KY	24-249	RURAL CO.
BULLITT	KY	24-259	RURAL CO.
CALDWELL	KY	24-135	SM. NON-M.
CAMPBELL	KY	08-086	SMSA CO.
CARROLL	KY	24-259	RURAL CO.
CASEY	KY	24-259	RURAL CO.
CLARK	KY	24-249	SM. NON-M.
CLINTON	KY	24-259	RURAL CO.
CUMBERLAND	KY	24-057	RURAL CO.
EDMONSON	KY	24-357	RURAL CO.
ESTILL	KY	24-249	RURAL CO.
FLEMING	KY	08-279	RURAL CO.
FRANKLIN	KY	24-259	SM. NON-M.
GALLATIN	KY	08-086	RURAL CO.
GRANT	KY	08-086	RURAL CO.
GRAYSON	KY	24-259	RURAL CO.
GREENUP	KY	05-198	SM. NON-M.
HARDIN	KY	24-259	LG-NON-M.
HARRISON	KY	24-249	SM. NON-M.
HENDERSON	KY	24-135	SMSA CO.
HICKMAN	KY	24-334	RURAL CO.
JACKSON	KY	24-249	RURAL CO.
JESSAMINE	KY	24-249	SM. NON-M.
[illegible]ON	KY	08-086	SMSA CO.
[illegible]	KY	21-287	RURAL CO.
[illegible]	KY	21-287	RURAL CO.
[illegible]	KY	24-249	RURAL CO.
LETCHER	KY	21-287	RURAL CO.
LINCOLN	KY	24-249	RURAL CO.
LOGAN	KY	24-057	SM. NON-M.
MC CRACKEN	KY	24-334	LG-NON-M.
MC LEAN	KY	24-332	RURAL CO.
MAGOFFIN	KY	05-198	RURAL CO.
MARSHALL	KY	24-334	RURAL CO.
MASON	KY	08-279	SM. NON-M.
MENIFEE	KY	24-249	RURAL CO.
METCALFE	KY	24-057	RURAL CO.
MONTGOMERY	KY	24-249	SM. NON-M.
MUHLENBERG	KY	24-332	RURAL CO.
NICHOLAS	KY	24-249	RURAL CO.
OLDHAM	KY	24-259	RURAL CO.
OWSLEY	KY	24-249	RURAL CO.
PERRY	KY	24-249	SM. NON-M.
POWELL	KY	24-249	RURAL CO.

COUNTY NAME	STATE	RANALLY NO.	TYPE
ALLEN	KY	24-057	RURAL CO.
BALLARD	KY	24-334	RURAL CO.
BATH	KY	24-249	RURAL CO.
BOONE	KY	08-086	SMSA CO.
BOYD	KY	05-198	SMSA CO.
BRACKEN	KY	08-279	RURAL CO.
BRECKINRIDGE	KY	24-259	RURAL CO.
BUTLER	KY	24-057	RURAL CO.
CALLOWAY	KY	24-334	SM. NON-M.
CARLISLE	KY	24-334	RURAL CO.
CARTER	KY	05-198	RURAL CO.
CHRISTIAN	KY	24-195	SM. NON-M.
CLAY	KY	21-287	RURAL CO.
CRITTENDEN	KY	24-135	RURAL CO.
DAVIESS	KY	24-332	SMSA CO.
ELLIOTT	KY	05-198	RURAL CO.
FAYETTE	KY	24-249	SMSA CO.
FLOYD	KY	05-198	RURAL CO.
FULTON	KY	25-282	RURAL CO.
GARRARD	KY	24-249	RURAL CO.
GRAVES	KY	24-334	SM. NON-M.
GREEN	KY	24-259	RURAL CO.
HANCOCK	KY	24-332	RURAL CO.
HARLAN	KY	21-287	RURAL CO.
HART	KY	24-259	RURAL CO.
HENRY	KY	24-259	RURAL CO.
HOPKINS	KY	24-135	SM. NON-M.
JEFFERSON	KY	24-259	SMSA CO.
JOHNSON	KY	05-198	RURAL CO.
KNOTT	KY	24-249	RURAL CO.
LARUE	KY	24-259	RURAL CO.
LAWRENCE	KY	05-198	RURAL CO.
LESLIE	KY	21-287	RURAL CO.
LEWIS	KY	08-357	RURAL CO.
LIVINGSTON	KY	24-334	RURAL CO.
LYON	KY	24-334	RURAL CO.
MC CREARY	KY	24-259	RURAL CO.
MADISON	KY	24-249	SM. NON-M.
MARION	KY	24-259	SM. NON-M.
MARTIN	KY	05-479	RURAL CO.
MEADE	KY	24-259	RURAL CO.
MERCER	KY	24-249	SM. NON-M.
MONROE	KY	24-057	RURAL CO.
MORGAN	KY	24-249	RURAL CO.
NELSON	KY	24-259	SM. NON-M.
OHIO	KY	24-332	RURAL CO.
OWEN	KY	24-259	RURAL CO.
PENDLETON	KY	08-086	RURAL CO.
PIKE	KY	05-479	RURAL CO.
PULASKI	KY	24-259	SM. NON-M.

27 (13)

11-16-72

Table 2

OPTOMETRISTS PER POPULATION BASE AND THE ADDITIONAL NUMBER NEEDED TO MEET THE PROPOSED RATIO: BY COUNTY

KENTUCKY COUNTY NAME	RESIDENT POPULATION (1,000'S)	NUMBER OF OPTOMETRISTS	PROPOSED RATIOS: 1 PER 15,000 POP	1 PER 16,500 POP	1 PER 18,000 POP	1 PER 19,500 POP	1 PER 21,000 POP	1 PER 22,500 POP	1 PER 24,000 POP	1 PER 25,500 POP
ADAIR	13	1	1.1	1.2	1.3	1.5	1.6	1.7	1.8	1.9
ALLEN	13	1	1.1	1.3	1.4	1.5	1.6	1.7	1.9	2.0
ANDERSON	9	1	1.5	1.7	1.9	2.0	2.2	2.3	2.5	2.7
BALLARD	8	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BARREN	29	3	1.5	1.7	1.8	2.0	2.1	2.3	2.5	2.6
BATH	9	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BELL	31	4	1.9	2.1	2.3	2.5	2.7	2.8	3.0	3.2
BOONE	33	2	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.5
BOURBON	19	1	0.8	0.8	0.9	1.0	1.1	1.2	1.2	1.3
BOYD	52	0	0.0* 3	0.0* 3	0.0* 2	0.0* 2	0.0* 2	0.0* 2	0.0* 2	0.0* 2
BOYLE	21	2	1.4	1.5	1.7	1.8	1.9	2.1	2.2	2.4
BRACKEN	7	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BREATHITT	14	1	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
BRECKINRIDGE	15	1	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
BULLITT	26	0	0.0* 1	0.0* 1	0.0* 1	0.0* 1	0.0* 1	0.0* 1	0.0* 1	0.0* 1
BUTLER	10	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALDWELL	13	2	2.2	2.5	2.7	2.9	3.2	3.4	3.6	3.8
CALLOWAY	28	4	2.1	2.3	2.6	2.8	3.0	3.2	3.4	3.6
CAMPBELL	89	6	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
CARLISLE	5	1	2.7	3.0	3.3	3.6	3.8	4.1	4.4	4.7
CARROLL	9	1	1.7	1.9	2.1	2.2	2.4	2.6	2.8	3.0
CARTER	20	1	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.2
CASEY	13	1	1.1	1.2	1.3	1.5	1.6	1.7	1.8	1.9
CHRISTIAN	56	4	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.8
CLARK	24	2	1.2	1.3	1.4	1.6	1.7	1.8	1.9	2.1
CLAY	18	1	0.8	0.8	0.9	1.0	1.1	1.2	1.3	1.3
CLINTON	8	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CRITTENDEN	9	1	1.7	1.9	2.1	2.2	2.4	2.6	2.8	3.0
CUMBERLAND	7	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAVIESS	79	9	1.7	1.8	2.0	2.2	2.3	2.5	2.7	2.8
EDMONSON	9	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ELLIOTT	6	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTILL	13	1	1.1	1.2	1.4	1.5	1.6	1.7	1.8	1.9
FAYETTE	174	7	0.6* 4	0.6* 3	0.7* 2	0.7* 1	0.8* 1	0.9	0.9	1.0
FLEMING	11	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FLOYD	36	1	0.4* 1	0.4* 1	0.5	0.5	0.5	0.6	0.6	0.7
FRANKLIN	34	3	1.3	1.4	1.5	1.7	1.8	1.9	2.0	2.2
FULTON	10	2	2.9	3.2	3.5	3.8	4.1	4.4	4.7	5.0
GALLATIN	4	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GARRARD	9	1	1.5	1.7	1.9	2.0	2.2	2.3	2.5	2.7
GRANT	10	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRAVES	31	4	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3
GRAYSON	17	2	1.8	2.0	2.1	2.3	2.5	2.7	2.9	3.0
GREEN	10	1	1.4	1.6	1.7	1.8	2.0	2.1	2.3	2.4

* SHORTAGE COUNTY: NUMBER TO THE RIGHT OF THE * IS THE NUMBER OF ADDITIONAL OPTOMETRISTS NEEDED TO MAKE THE COUNTY A NON-SHORTAGE AREA

Table 2 (cont.2)

11-16-72

OPTOMETRISTS PER POPULATION BASE AND THE ADDITIONAL NUMBER NEEDED TO MEET THE PROPOSED RATIO: BY COUNTY

KENTUCKY COUNTY NAME	RESIDENT POPULATION (1,000'S)	NUMBER OF OPTOMETRISTS	PROPOSED RATIOS: 1 PER 15,000 POP	1 PER 16,500 POP	1 PER 18,000 POP	1 PER 19,500 POP	1 PER 21,000 POP	1 PER 22,500 POP	1 PER 24,000 POP	1 PER 25,500 POP
GREENUP	33	6	2.7	2.9	3.2	3.5	3.8	4.0	4.3	4.6
HANCOCK	7	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARDIN	78	2	0.3* 3	0.4* 2	0.4* 2	0.4* 2	0.5* 1	0.5* 1	0.6* 1	0.6*
HARLAN	37	2	0.8	0.8	0.9	1.0	1.1	1.2	1.2	1.3
HARRISON	14	1	1.0	1.1	1.2	1.3	1.4	1.5	1.7	1.8
HART	14	2	2.1	2.3	2.5	2.7	3.0	3.2	3.4	3.6
HENDERSON	36	3	1.2	1.3	1.5	1.6	1.7	1.8	2.0	2.1
HENRY	11	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HICKMAN	6	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HOPKINS	38	6	2.3	2.5	2.8	3.0	3.3	3.5	3.7	4.0
JACKSON	10	1	1.5	1.6	1.8	1.9	2.1	2.2	2.4	2.5
JEFFERSON	695	42	0.9* 4	0.9	1.0	1.1	1.2	1.3	1.4	1.5
JESSAMINE	17	2	1.7	1.8	2.0	2.2	2.4	2.5	2.7	2.9
JOHNSON	18	2	1.7	1.8	2.0	2.2	2.4	2.5	2.7	2.9
KENTON	129	10	1.1	1.2	1.3	1.5	1.6	1.7	1.8	1.9
KNOTT	15	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KNOX	24	1	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.0
LARUE	11	1	1.4	1.5	1.6	1.8	1.9	2.1	2.2	2.3
LAUREL	27	2	1.0	1.2	1.3	1.4	1.5	1.6	1.7	1.8
LAWRENCE	11	1	1.4	1.5	1.6	1.8	1.9	2.1	2.2	2.3
LEE	7	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESLIE	12	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LETCHER	23	1	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1
LEWIS	12	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LINCOLN	17	0	0.0* 1	0.0* 1	0.0	0.0	0.0	0.0	0.0	0.0
LIVINGSTON	8	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOGAN	22	2	1.3	1.5	1.6	1.7	1.9	2.0	2.2	2.3
LYON	6	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MC CRACKEN	58	6	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6
MC CREARY	13	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MC LEAN	9	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MADISON	43	5	1.7	1.9	2.1	2.2	2.4	2.6	2.8	2.9
MAGOFFIN	11	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MARION	17	1	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5
MARSHALL	20	2	1.4	1.6	1.7	1.9	2.0	2.2	2.3	2.5
MARTIN	9	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MASON	17	3	2.6	2.8	3.1	3.3	3.6	3.9	4.1	4.4
MEADE	19	0	0.0* 1	0.0* 1	0.0* 1	0.0	0.0	0.0	0.0	0.0
MENIFEE	4	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MERCER	16	2	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.1
METCALFE	8	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MONROE	12	1	1.2	1.4	1.5	1.6	1.8	1.9	2.0	2.1
MONTGOMERY	15	1	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6
MORGAN	10	1	1.4	1.6	1.7	1.9	2.0	2.2	2.3	2.5

* SHORTAGE COUNTY: NUMBER TO THE RIGHT OF THE * IS THE NUMBER OF ADDITIONAL OPTOMETRISTS NEEDED TO MAKE THE COUNTY A NON-SHORTAGE AREA

Table 2 (cont.3)

11-16-72

OPTOMETRISTS PER POPULATION BASE AND THE ADDITIONAL NUMBER NEEDED TO MEET THE PROPOSED RATIO: BY COUNTY

KENTUCKY COUNTY NAME	RESIDENT POPULATION (1,000'S)	NUMBER OF OPTOMETRISTS	PROPOSED RATIOS: 1 PER 15,000 POP	1 PER 16,500 POP	1 PER 18,000 POP	1 PER 19,500 POP	1 PER 21,000 POP	1 PER 22,500 POP	1 PER 24,000 POP	1 PER 25,500 POP
MUHLENBERG	28	2	1.0	1.2	1.3	1.4	1.5	1.6	1.7	1.8
NELSON	23	2	1.2	1.4	1.5	1.6	1.7	1.9	2.0	2.1
NICHOLAS	7	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OHIO*	19	2	1.6	1.7	1.9	2.0	2.2	2.4	2.5	2.7
OLDHAM	15	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OWEN	8	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OWSLEY	5	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PENDLETON	10	1	1.5	1.6	1.8	1.9	2.1	2.2	2.4	2.5
PERRY	26	3	1.7	1.9	2.1	2.2	2.4	2.6	2.8	2.9
PIKE	61	2	0.4* 2	0.5* 1	0.5* 1	0.6* 1	0.6	0.7	0.7	0.8
POWELL	8	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PULASKI	35	4	1.7	1.8	2.0	2.2	2.3	2.5	2.7	2.8
ROBERTSON	2	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCKCASTLE	12	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROWAN	17	1	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5
RUSSELL	11	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCOTT	18	1	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.4
SHELBY	19	1	0.7	0.8	0.9	1.0	1.1	1.1	1.2	1.3
SIMPSON	13	1	1.1	1.2	1.3	1.5	1.6	1.7	1.8	1.9
SPENCER	5	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TAYLOR	17	3	2.6	2.8	3.1	3.4	3.6	3.9	4.2	4.4
TODD	11	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TRIGG	9	1	1.7	1.9	2.0	2.2	2.4	2.6	2.7	2.9
TRIMBLE	5	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UNION	14	1	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6
WARREN	57	6	1.5	1.7	1.8	2.0	2.1	2.3	2.5	2.6
WASHINGTON	11	1	1.4	1.5	1.6	1.8	1.9	2.1	2.2	2.3
WAYNE	14	1	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
WEBSTER	13	1	1.1	1.2	1.3	1.4	1.5	1.6	1.8	1.9
WHITLEY	24	3	1.8	2.0	2.2	2.4	2.6	2.8	2.9	3.1
WOLFE	4	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WOODFORD	14	1	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
TOTAL SHORTAGE COUNTIES	219		9	8	6	5	4	3	3	3
TOTAL NUMBER SHORT			20	13	9	7	5	4	4	0

* SHORTAGE COUNTY: NUMBER TO THE RIGHT OF THE * IS THE NUMBER OF ADDITIONAL OPTOMETRISTS NEEDED TO MAKE THE COUNTY A NON-SHORTAGE AREA

Table 3

12-14-72

PODIATRISTS PER POPULATION BASE AND THE ADDITIONAL NUMBER NEEDED TO MEET THE PROPOSED RATIO: BY SMSA AND COUNTY

SMSA CODE	COUNTY NAME	STATE ABBR.	RESIDENT POP (1,000'S)	NO. OF PODIATRISTS	PROPOSED RATIOS: 1 PER 15,000 POP	1 PER 20,000 POP	1 PER 25,000 POP	1 PER 30,000 POP	1 PER 35,000 POP	1 PER 40,000 POP	1 PER 45,000 POP	1 PER 50,000 POP
8840	THE DISTRICT	D C	756.6	64	1.2	1.6	2.1	2.5	2.9	3.3	3.8	4.2
	MONTGOMERY	MD	522.8	28	0.8* 6	1.0	1.3	1.6	1.8	2.1	2.4	2.6
	PRINCE GEORGES	MD	660.5	11	0.2* 33	0.3* 22	0.4* 15	0.4* 11	0.5* 7	0.6* 5	0.7* 3	0.8* 2
	ARLINGTON	VA	285.2	13	0.6* 6	0.9* 1	1.1	1.3	1.5	1.8	2.0	2.2
	FAIRFAX	VA	487.7	7	0.2* 25	0.2* 17	0.3* 12	0.4* 9	0.5* 6	0.5* 5	0.6* 3	0.7* 2
	LOUDOUN	VA	37.1	0	0.0* 2	0.0* 1	0.0* 1	0.0* 1	0.0* 1	0.0	0.0	0.0
	PRINCE WILLIAM	VA	111.0	1	0.1* 6	0.1* 4	0.2* 3	0.2* 2	0.3* 2	0.3* 1	0.4* 1	0.4* 1
	SMSA TOTAL		2,860.9	124	0.6* 66	0.8* 19	1.0*-10	1.3*-29	1.5*-43	1.7*-53	1.9*-61	2.1*-67
	TOTAL SHORTAGE COUNTIES				6	5	4	4	4	3	3	3
	TOTAL NUMBER SHORT				78	45	31	23	16	11	7	5
8920	BLACK HAWK	IOW	132.9	10	1.1	1.5	1.8	2.2	2.6	3.0	3.3	3.7
	SMSA TOTAL		132.9	10	1.1*- 2	1.5*- 4	1.8*- 5	2.2*- 6	2.6*- 7	3.0*- 7	3.3*- 8	3.7*- 8
	TOTAL SHORTAGE COUNTIES				0	0	0	0	0	0	0	0
	TOTAL NUMBER SHORT				0	0	0	0	0	0	0	0
8960	PALM BEACH	FLA	348.8	19	0.8* 4	1.0	1.3	1.6	1.9	2.1	2.4	2.7
	SMSA TOTAL		348.8	19	0.8* 4	1.0*- 2	1.3*- 6	1.6*- 8	1.9*-10	2.1*-11	2.4*-12	2.7*-13
	TOTAL SHORTAGE COUNTIES				1	0	0	0	0	0	0	0
	TOTAL NUMBER SHORT				4	0	0	0	0	0	0	0
9000	BELMONT	OH	80.8	2	0.3* 3	0.4* 2	0.6* 1	0.7	0.8	0.9	1.1	1.2
	MARSHALL	W V	37.5	0	0.0* 2	0.0* 1	0.0* 1	0.0* 1	0.0* 1	0.0	0.0	0.0
	OHIO	W V	64.1	8	1.8	2.4	3.1	3.7	4.3	4.9	5.6	6.2
	SMSA TOTAL		182.4	10	0.8* 2	1.0*- 1	1.3*- 3	1.6*- 4	1.9*- 5	2.1*- 6	2.4*- 6	2.7*- 7
	TOTAL SHORTAGE COUNTIES				2	2	2	1	1	0	0	0
	TOTAL NUMBER SHORT				5	3	2	1	1	0	0	0
9040	BUTLER	KAN	38.6	0	0.0* 2	0.0* 1	0.0* 1	0.0* 1	0.0* 1	0.0	0.0	0.0
	SEDGWICK	KAN	350.8	12	0.5* 11	0.6* 6	0.8* 2	1.0	1.1	1.3	1.5	1.7
	SMSA TOTAL		389.4	12	0.4* 13	0.5* 7	0.7* 3	0.9*	1.0*- 1	1.2*- 3	1.3*- 4	1.5*- 5
	TOTAL SHORTAGE COUNTIES				2	2	2	1	1	0	0	0
	TOTAL NUMBER SHORT				13	6	3	1	1	0	0	0

* SHORTAGE COUNTY: NUMBER TO THE RIGHT OF THE * IS THE NUMBER OF ADDITIONAL PODIATRISTS NEEDED TO MAKE THE COUNTY A NON-SHORTAGE AREA

01-04-73

Table 4

ACTIVE NON-FEDERAL M.D.'S, D.O.'S AND M.D. - D.O. POPULATION RATIOS
BY COUNTY FOR THE STATE OF MISSOURI

STATE NAME COUNTY NAME	1970 CENSUS POPULATION (000'S)	ACTIVE NON-FEDERAL M.D.'S (1970)	M.D.'S PER 100,000 POPULATION	ACTIVE NON-FEDERAL D.O.'S (1971)	D.O.'S PER 100,000 POPULATION
MISSOURI					
ADAIR	22.5	4	18	68	302
ANDREW	11.9	3	25	0	0
ATCHISON	9.2	4	43	1	11
AUDRAIN	25.3	14	55	8	32
BARRY	19.6	8	41	6	30
BARTON	10.4	6	58	2	19
BATES	15.4	7	45	2	13
BENTON	9.7	2	21	3	31
BOLLINGER	8.8	0	0	1	11
BOONE	81.0	384	474	4	5
BUCHANAN	87.0	96	110	10	12
BUTLER	33.5	36	107	2	6
CALDWELL	8.3	3	36	2	24
CALLAWAY	25.8	24	93	9	35

01-04-73

Table 4 (cont.2)

ACTIVE NON-FEDERAL M.D.'S, D.O.'S AND M.D. - D.O. POPULATION RATIOS
BY COUNTY FOR THE STATE OF MISSOURI

STATE NAME COUNTY NAME	1970 CENSUS POPULATION (000'S)	ACTIVE NON-FEDERAL M.D.'S (1970)	M.D.'S PER 100,000 POPULATION	ACTIVE NON-FEDERAL D.O.'S (1971)	D.O.'S PER 100,000 POPULATION
MISSOURI					
**********					
CAMDEN	13.3	6	45	0	0
CAPE GIRARDEAU	49.4	55	111	3	6
CARROLL	12.6	4	32	4	32
CARTER	3.9	0	0	1	26
CASS	39.5	7	18	6	15
CEDAR	9.4	1	11	3	32
CHARITON	11.0	2	18	3	27
CHRISTIAN	15.1	1	7	4	26
CLARK	8.7	0	0	1	12
CLAY	123.4	46	37	7	6
CLINTON	12.4	5	40	3	25
COLE	46.7	53	115	20	43
COOPER	14.7	9	61	2	14
CRAWFORD	14.8	3	20	1	7

01-04-73

Table 4 (cont.3)

ACTIVE NON-FEDERAL M.D.'S, D.O.'S AND M.D. + D.O. POPULATION RATIOS BY COUNTY FOR THE STATE OF MISSOURI

STATE NAME COUNTY NAME	1970 CENSUS POPULATION (000'S)	ACTIVE NON-FEDERAL M.D.'S (1970)	M.D.'S PER 100,000 POPULATION	ACTIVE NON-FEDERAL D.O.'S (1971)	D.O.'S PER 100,000 POPULATION
MISSOURI					
**********					
DADE	6.8	3	44	0	0
DALLAS	10.0	1	10	3	30
DAVIESS	8.4	3	36	2	24
DE KALB	7.3	0	0	3	41
DENT	11.4	3	26	2	18
DOUGLAS	9.2	2	22	1	11
DUNKLIN	33.7	18	53	1	3
FRANKLIN	65.1	21	38	4	7
GASCONADE	11.8	3	25	7	60
GENTRY	8.0	3	38	1	12
GREENE	152.9	207	135	16	11
GRUNDY	11.8	4	34	0	0
HARRISON	10.2	3	29	4	40
HENRY	18.4	7	38	8	44

01-04-73

Table 2 (cont.4)

ACTIVE NON-FEDERAL M.D.'S, D.O.'S AND M.D. - D.O. POPULATION RATIOS
BY COUNTY FOR THE STATE OF MISSOURI

STATE NAME COUNTY NAME	1970 CENSUS POPULATION (000'S)	ACTIVE NON-FEDERAL M.D.'S (1972)	M.D.'S PER 100,000 POPULATION	ACTIVE NON-FEDERAL D.O.'S (1971)	D.O.'S PER 100,000 POPULATION
MISSOURI					
**********					
HICKORY	4.5	0	0	1	22
HOLT	6.6	2	30	2	30
HOWARD	10.5	5	48	1	9
HOWELL	23.4	9	38	1	5
IRON	9.5	4	42	0	0
JACKSON	654.6	999	153	164	25
JASPER	79.8	70	88	23	29
JEFFERSON	105.2	22	21	6	6
JOHNSON	34.1	14	41	5	15
KNOX	5.7	2	35	4	70
LACLEDE	19.9	8	40	2	10
LAFAYETTE	26.6	14	53	7	26
LAWRENCE	24.5	17	69	6	25
LEWIS	11.0	1	9	3	27

01-04-73

Table 4 (cont.5)

ACTIVE NON-FEDERAL M.D.'S, D.O.'S AND M.D. - D.O. POPULATION RATIOS
BY COUNTY FOR THE STATE OF MISSOURI

STATE NAME COUNTY NAME	1970 CENSUS POPULATION (000'S)	ACTIVE NON-FEDERAL M.D.'S (1970)	M.D.'S PER 100,000 POPULATION	ACTIVE NON-FEDERAL D.O.'S (1971)	D.O.'S PER 100,000 POPULATION
MISSOURI					
**********					
LINCOLN	18.0	4	22	5	28
LINN	15.1	6	40	5	33
LIVINGSTON	15.3	6	39	4	26
MC DONALD	12.3	0	0	3	24
MACON	15.4	4	26	9	58
MADISON	8.6	5	58	4	47
MARIES	6.8	0	0	2	29
MARION	28.1	23	82	6	21
MERCER	4.9	0	0	3	61
MILLER	15.0	2	13	6	40
MISSISSIPPI	16.6	3	18	5	30
MONITEAU	10.8	5	46	2	19
MONROE	9.5	2	21	3	32
MONTGOMERY	11.0	2	18	5	46

01-04-73

Table 4 (cont.6)

ACTIVE NON-FEDERAL M.D.'S, D.O.'S AND M.D. - D.O. POPULATION RATIOS
BY COUNTY FOR THE STATE OF MISSOURI

STATE NAME COUNTY NAME	1970 CENSUS POPULATION (000'S)	ACTIVE NON-FEDERAL M.D.'S (1970)	M.D.'S PER 100,000 POPULATION	ACTIVE NON-FEDERAL D.O.'S (1971)	D.O.'S PER 100,000 POPULATION
MISSOURI					
**********					
MORGAN	10.1	5	50	0	50
NEW MADRID	23.4	8	34	2	9
NEWTON	32.9	10	30	8	25
NODAWAY	22.5	7	31	2	9
OREGON	9.2	2	22	3	32
OSAGE	11.0	0	0	2	18
OZARK	6.2	0	0	4	65
PEMISCOT	26.3	10	38	1	4
PERRY	14.4	6	42	0	0
PETTIS	34.0	28	82	8	24
PHELPS	29.5	10	34	3	10
PIKE	16.9	11	65	3	18
PLATTE	32.1	5	16	1	3
POLK	15.4	6	39	2	13

01-04-73

Table 4 (cont.7)

ACTIVE NON-FEDERAL M.D.'S, D.O.'S AND M.D. - D.O. POPULATION RATIOS
BY COUNTY FOR THE STATE OF MISSOURI

STATE NAME COUNTY NAME	1970 CENSUS POPULATION (000'S)	ACTIVE NON-FEDERAL M.D.'S (1970)	M.D.'S PER 100,000 POPULATION	ACTIVE NON-FEDERAL D.O.'S (1971)	D.O.'S PER 100,000 POPULATION
MISSOURI					
**********					
PULASKI	53.7	6	11	2	4
PUTNAM	5.9	0	0	4	68
RALLS	7.8	0	0	2	26
RANDOLPH	22.4	10	45	8	35
RAY	17.6	5	28	2	12
REYNOLDS	6.1	0	0	1	16
RIPLEY	9.8	1	10	2	21
ST. CHARLES	93.0	46	49	6	7
ST. CLAIR	7.6	6	79	1	13
ST. FRANCOIS	36.8	28	76	13	35
ST. LOUIS	951.3	520	55	42	4
ST. LOUIS CITY	622.3	2524	406	82	13
STE GENEVIEVE	12.8	3	23	0	0
SALINE	24.6	19	77	1	4

01-04-73

Table 4 (cont.8)

ACTIVE NON-FEDERAL M.D.'S, D.O.'S AND M.D. + D.O. POPULATION RATIOS
BY COUNTY FOR THE STATE OF MISSOURI

STATE NAME COUNTY NAME	1970 CENSUS POPULATION (000'S)	ACTIVE NON-FEDERAL M.D.'S (1972)	M.D.'S PER 100,000 POPULATION	ACTIVE NON-FEDERAL D.O.'S (1971)	D.O.'S PER 100,000 POPULATION
MISSOURI					
**********					
SCHUYLER	4.7	0	0	3	64
SCOTLAND	5.5	0	0	3	55
SCOTT	33.2	24	72	1	3
SHANNON	7.2	0	0	2	28
SHELBY	7.9	1	13	4	50
STODDARD	25.7	5	19	8	32
STONE	9.9	4	40	0	0
SULLIVAN	7.6	1	13	2	26
TANEY	13.0	8	62	1	7
TEXAS	18.3	3	16	2	11
VERNON	19.0	17	89	5	27
WARREN	9.7	2	21	1	10
WASHINGTON	15.1	4	26	2	14
WAYNE	8.5	1	12	3	35

01-04-73

Table 4 (cont.9)

ACTIVE NON-FEDERAL M.D.'S, D.O.'S AND M.D. - D.O. POPULATION RATIOS
BY COUNTY FOR THE STATE OF MISSOURI

STATE NAME COUNTY NAME	1970 CENSUS POPULATION (000'S)	ACTIVE NON-FEDERAL M.D.'S (1971)	M.D.'S PER 100,000 POPULATION	ACTIVE NON-FEDERAL D.O.'S (1971)	D.O.'S PER 100,000 POPULATION
MISSOURI					
WEBSTER	15.5	2	13	2	13
WORTH	3.4	1	29	1	29
WRIGHT	13.6	2	15	5	36
TOTALS	4674.0	5661	121.1	765	16.4

Table 5

TOTAL PODIATRISTS BY SIZE OF SMSA

SMSA CODE	TOTAL POPULATION (100s)	TOTAL PODIATRISTS (1968)	PODIATRISTS/100000 POPULATION
U.S. TOTAL	1438491	7321	5
5600	115719	1178	10
4480	70320	317	5
1600	69791	612	9
6160	48180	463	10
2160	42000	170	4
1120	33755	350	10
7360	31096	259	8
8840	28609	124	4
6280	24013	122	5
7040	23629	97	4
0720	20705	52	3
1680	20640	195	9
3360	19852	45	2
5640	18566	130	7
5120	18136	50	3
1920	15560	41	3
7600	14218	34	2
0360	14204	40	3
5080	14036	69	5
0520	13902	28	2
1640	13849	51	4
6040	13587	86	6
7320	13578	47	3
1280	13490	62	5
5000	12679	68	5
3760	12541	29	2
2080	12274	54	4
6780	11432	31	3

Table 5 (cont. 2)

TOTAL PODIATRISTS BY SIZE OF SMSA

SMSA CODE	TOTAL POPULATION (1005)	TOTAL PODIATRISTS (1968)	PODIATRISTS/100000 POPULATION
3480	11095	34	3
7400	10647	43	4
5560	10458	22	2
8280	10126	42	4
6440	10095	24	2
6200	9676	34	4
1840	9161	49	5
6840	8827	38	4
7240	8640	15	2
2000	8502	40	5
4520	8266	29	4
3280	8167	59	7
6920	8005	22	3
1160	7928	75	9
4920	7702	16	2
6480	7685	58	8
3320	7684	6	1
2800	7620	22	3
5480	7449	57	8
1000	7391	7	1
0160	7221	29	4
8400	6925	35	5
5720	6808	12	2
0080	6794	34	5
5880	6408	18	3
9240	6379	39	6
8160	6366	22	3
2960	6333	18	3
2680	6202	28	5
3640	6094	44	7
3120	6039	16	3

Table 5 (cont. 3)

TOTAL PODIATRISTS BY SIZE OF SMSA

SMSA CODE	TOTAL POPULATION (100s)	TOTAL PODIATRISTS (1968)	PODIATRISTS/100000 POPULATION
5460	5839	19	3
8000	5830	43	7
7160	5576	18	3
0240	5438	26	5
5360	5410	5	1
5920	5401	20	4
3000	5393	17	3
9320	5359	36	7
6760	5336	9	2
3600	5288	11	2
9160	4996	20	4
2640	4964	13	3
8560	4768	17	4
4410	4594	23	5
2480	4444	21	5
5960	4280	12	3
2840	4130	8	2
8200	4110	9	2
3240	4106	24	6
1520	4094	8	2
3840	4001	10	3
9040	3894	12	3
4040	3785	10	3
6000	3766	8	2
5160	3766	4	1
1320	3722	15	4
1960	3627	24	7
2320	3594	7	2
8520	3517	11	3
8960	3488	19	6
9120	3424	21	6

Table 5 (cont. 4)

TOTAL PODIATRISTS BY SIZE OF SMSA

SMSA CODE	TOTAL POPULATION (100s)	TOTAL PODIATRISTS (1968)	PODIATRISTS/100000 POPULATION
6120	3421	20	6
8680	3405	8	2
1200	3333	29	9
9280	3295	16	5
0680	3291	7	2
4400	3231	8	3
1760	3228	1	0
4000	3196	13	4
0840	3160	5	2
0200	3157	16	5
1560	3049	5	2
8480	3040	20	7
1440	3039	7	2
0960	3026	13	4
0380	3003	2	1
3160	2994	2	1
6680	2964	21	7
0640	2957	7	2
7680	2946	5	2
5680	2921	34	12
4720	2903	11	4
8120	2902	6	2
7840	2875	11	4
2120	2862	14	5
0760	2852	4	1
1880	2849	7	3
2760	2805	14	5
7800	2801	15	5
0460	2770	9	3
4120	2732	6	2
6880	2721	13	5

Table 5 (cont. 5)

TOTAL PODIATRISTS BY SIZE OF SMSA

SMSA CODE	TOTAL POPULATION (100s)	TOTAL PODIATRISTS (1968)	PODIATRISTS/100000 POPULATION
2240	2654	6	2
7480	2643	13	5
2360	2637	13	5
3680	2627	7	3
3560	2589	3	1
4440	2569	12	5
3400	2537	15	6
0600	2534	8	3
7120	2500	8	3
8720	2492	11	5
6080	2430	2	1
1800	2387	6	3
1720	2359	9	4
0440	2342	4	2
7560	2341	14	6
2440	2328	8	3
4900	2299	3	1
6640	2284	4	2
3440	2262	2	1
3980	2272	5	2
3200	2263	6	3
4760	2240	12	5
6460	2223	10	5
6960	2198	8	4
2400	2134	5	2
2560	2121	3	1
4680	2063	4	2
7500	2048	14	7
3720	2016	6	3
5240	2013	1	1
5170	1945	6	3

Table 5 (cont. 6)

TOTAL PODIATRISTS BY SIZE OF SMSA

SMSA CODE	TOTAL POPULATION (100s)	TOTAL PODIATRISTS (1968)	PODIATRISTS/100000 POPULATION
6400	1924	9	5
2280	1904	3	2
7520	1878	3	2
7080	1867	6	3
9000	1824	10	6
4880	1816	1	1
6800	1813	3	2
4600	1793	7	4
8320	1750	3	2
0560	1750	19	11
4280	1744	7	4
7820	1737	1	1
4320	1713	8	5
6600	1708	6	4
2920	1698	1	1
2020	1695	4	3
4360	1680	6	4
8080	1656	10	6
1400	1632	6	4
1360	1632	11	7
7880	1613	21	13
2720	1603	3	2
3810	1597	2	1
3080	1583	6	4
5320	1574	5	3
7960	1572	12	8
8440	1553	5	3
7920	1529	4	3
6320	1495	11	8
2790	1484	1	1
8800	1476	5	4

Table 5 (cont. 7)

TOTAL PODIATRISTS BY SIZE OF SMSA

SMSA CODE	TOTAL POPULATION (100s)	TOTAL PODIATRISTS (1968)	PODIATRISTS/100000 POPULATION
3960	1454	2	1
9260	1451	3	2
0480	1450	3	2
0320	1444	7	5
6020	1439	6	4
3520	1433	3	2
0780	1421	5	4
1240	1404	2	1
0400	1385	6	5
6520	1377	4	3
0280	1354	7	5
0920	1345	1	1
8920	1329	10	8
4800	1300	4	3
5280	1293	3	3
9080	1277	6	5
5840	1262	5	4
2040	1251	6	5
7485	1237	5	4
4640	1232	2	2
8760	1214	6	5
6720	1210	12	10
7510	1203	8	7
2520	1202	2	2
6560	1183	5	5
0220	1181	1	1
3800	1179	7	6
2650	1175	1	1
0800	1174	5	5
7720	1161	6	5
8600	1160	3	3

Table 5 (cont. 8)

TOTAL PODIATRISTS BY SIZE OF SMSA

SMSA CODE	TOTAL POPULATION (100s)	TOTAL PODIATRISTS (1968)	PODIATRISTS/100000 POPULATION
5200	1155	2	2
0040	1139	3	3
6140	1136	4	4
9140	1132	5	5
1080	1123	5	5
3880	1098	0	0
3920	1093	5	5
4200	1081	2	2
9200	1073	2	2
2700	1053	4	4
2900	1047	2	2
1040	1045	5	5
8240	1030	2	2
2335	1016	7	7
8360	1013	1	1
8640	972	3	3
7760	952	6	7
2880	941	1	1
6470	933	2	2
5800	918	2	2
2200	906	5	6
0120	896	3	4
0880	874	3	4
7000	870	4	5
5240	[illegible]	1	1
6820	841	4	5
7640	833	2	3
3040	819	4	5
1740	810	2	3
3870	805	5	6
5990	793	3	4

Table 5 (cont. 9)

TOTAL PODIATRISTS BY SIZE OF SMSA

SMSA CODE	TOTAL POPULATION (100s)	TOTAL PODIATRISTS (1968)	PODIATRISTS/100000 POPULATION
4080	730	0	0
7200	711	2	3
5040	655	6	10
1260	580	1	2

Table 6

AHEC HEALTH AREA RANKING FOR SELECTED MEASURES OF HEALTH MANPOWER

12/07/72

STATE NAME: KENTUCKY

DEMOGRAPHIC MEASURES:

POPULATION...	19 RANK	POP./SQ.MILE..	20 RANK	LAND AREA....	36 RANK	% NONWHITE POPULATION..	29 RANK
% RURAL POP..	1 RANK	% 0 TO 4 POP..	27 RANK	% 65 & OVER..	21 RANK	% POP GROWTH SINCE 60..	36 RANK

ECONOMIC MEASURES:

INCOME/CAPITA..	43 RANK	% HHDS WITH INCOME OF $10,000..	39 RANK	% INCOME GROWTH SINCE 60..	24 RANK
TOTAL INCOME...	7 RANK	NO. ADC RECIPIENTS/100000 POP..	11 RANK		

MANPOWER MEASURES:

PHYSICIANS/100000 POP..	39 RANK	NURSES(RN)/100000 POP...	42 RANK	NURSES(RN)/100 HOSP. BEDS ...	40 RANK
DENTISTS/100000 POP....	41 RANK	NURSES(LPN)/100000 POP..	42 RANK	TOTAL NURSES/100 HOSP. BEDS..	43 RANK

HEALTH EDUCATION MEASURES:

MD ENROLLMENT/100000 POP...	14 RANK	TOTAL NURSING ENROLLMENT/100000 POP..	27 RANK
DDS ENROLLMENT/100000 POP..	6 RANK	AUXIALIARY PROGRAMS/1000 MD.....	20 RANK
		NO.AUXIALIARY PROGRAMS/100000 POP....	12 RANK

NO. INTERNSHIPS OFFERED/100000 POP.. 7 RANK NO. RESIDENCIES OFFERED/100000 POP.. 36 RANK

HOSPITAL RESOURCE MEASURES:

NO. BEDS/100000 POP.....	42 RANK	TOTAL NO. SERVICES/100000 POP..	33 RANK
% HOSP. UNDER 70% UTIL.....	22 RANK	AVERAGE NO. SERVICES/HOSPITAL..	30 RANK
% HOSP. OVER 80% UTIL.....	17 RANK		
% HOSP. WITH 15 + SERVICES..	42 RANK	NO. OUTPATIENT VISITS.. 20 RANK	OUTPATIENT VISITS/100000 POP.. 25 RANK

VITAL STATISTIC MEASURES:

MORTALITY/100000 POP..	14 RANK	INFANT MORTALITY/100 BIRTHS..	18 RANK	% BIRTHS IN HOSPITAL..	36 RANK

APPENDIX A:

****
********** AREA RESOURCE FILE **********
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********** AREA RESOURCE FILE **********
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COL-COL	NAME	CHARACTERISTICS	SOURCE	YR DATA	DATE ON
1	BLANK	REQUIRED BY THE UPDATE SYSTEM			
2-3	FIPS STATE CDE		DERIVED FROM GSA	1968	
4-6	MOD FIPS COUNTY CODE	INDEPENDENT CITIES RECODED	DERIVED FROM GSA	1968	
7-8	STATE ECONOMIC AREA CODE		POSTED, GICS		7/73
9-11	ECONOMIC SUBREGION CODE		POSTED, GICS		7/73
12-13	FEDERAL REGION CODE		OFFICE MANGMT & BUDGET		6/73
*********					
19-20	GSA 1967 STATE CDE		DDH,1-2	1967	
21-23	GSA 1967 COUNTY CDE		DDH,6-8	1967	
24-42	STATE NAME				
43-45	STATE NAME ABBREV		DDH,3-5		
46-70	COUNTY NAME		DDH,9-33		
71-72	RANALLY MAJOR AREA CDE		DDH,49-50	1963	6/71
73-75	RANALLY MINOR AREA CDE		DDH,51-53	1963	6/71
76-78	ORE ECONOMIC AREA CDE		DDH,46-48	1969	6/71
79-82	SMSA CDE		POSTED, CENSUS PUB,MAY '73	1973	8/73
*********					
83-90	LAND AREA	NO OF SQUARE MI AS OF 1960	POSTED CCDB '67	1960	12/71
91-92	CITY SIZE CDE	UNDER 2.5K TO 1+ MILLION	CODED FROM CENSUS POP TAPE	1970	9/72
*********					
94-100	CENSUS '70 POP	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
101-106	SM POP	IN HUNDREDS, 12/31/69	SM,27-32	1969	9/71
107-111	CENSUS '70 HOUSEHLDS	IN HUNDREDS	POSTED, '70 CENSUS OF POP	1970	10/71
112-116	SM HOUSEHLDS	IN HUNDREDS, 12/31/69	SM,74-78	1969	9/71
*********					
123-128	CENSUS '70 URBAN POP		4TH COUNT	1970	8/73
129-133	CEN '70 MALE POP - AGE 0-4	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
134-138	CEN '70 FEMALE POP - AGE 0-4	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
139-143	CEN '70 MALE POP - AGE 5-14	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
144-148	CEN '70 FEMALE POP - AGE 5-14	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
149-153	CEN '70 MALE POP - AGE 15-24	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
154-158	CEN '70 FEMALE POP - AGE 15-24	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
159-163	CEN '70 MALE POP - AGE 25-34	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
164-168	CEN '70 FEMALE POP - AGE 25-34	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
169-173	CEN '70 MALE POP - AGE 35-44	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
174-178	CEN '70 FEMALE POP - AGE 35-44	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
179-183	CEN '70 MALE POP - AGE 45-54	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
184-188	CEN '70 FEMALE POP - AGE 45-54	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
189-193	CEN '70 MALE POP - AGE 55-64	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
194-198	CEN '70 FEMALE POP - AGE 55-64	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
199-203	CEN '70 MALE POP - AGE 65 +	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
204-208	CEN '70 FEMALE POP - AGE 65 +	IN HUNDREDS	POP, ADD TOT IN RANGES	1970	10/71
209-213	'72 POPULATION ESTIMATES	IN HUNDREDS	U.S. CENSUS, CUR POP REP	1972	9/73
214-218	'71 POPULATION ESTIMATES	IN HUNDREDS	U.S. CENSUS, CUR POP REP	1971	9/73

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********** AREA RESOURCE FILE **********
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COL-COL	NAME	CHARACTERISTICS	SOURCE	YR DATA	DATE ON
219-225	CENSUS '70 WHITE POP	IN HUNDREDS	POP,174-178	1970	10/71
226-232	CENSUS '70 BLACK POP	IN HUNDREDS	POP,179-183	1970	10/71
233-238	CENSUS '70 OTHER POP	IN HUNDREDS	POP,184-198	1970	10/71
239-245	CENSUS '40 POP		DMI,72-78	1940	11/71
246-252	CENSUS '50 POP		DMI,6-12	1950	11/71
253-259	CENSUS '60 POP		DMI,51-57	1960	11/71
260-263	LARGE ANIMAL POP	IN THOUSANDS	AGRI,25-60	1969	11/72
*********					
275-283	PERSONAL INCOME	14 YRS OLD & OVER	4TH COUNT	1970	9/73
284-289	PERS INCOME = UNDER $3000	FAMILIES + UNRELATED INDIV.	4TH COUNT	1970	8/73
290-295	PERS INCOME = $3000-4999	FAMILIES + UNRELATED INDIV.	4TH COUNT	1970	8/73
296-302	PERS INCOME = $5000-7999	FAMILIES + UNRELATED INDIV.	4TH COUNT	1970	8/73
303-309	PERS INCOME = $8000-9999	FAMILIES + UNRELATED INDIV.	4TH COUNT	1970	8/73
310-316	PERS INCOME = $10000 +	FAMILIES + UNRELATED INDIV.	4TH COUNT	1970	8/73
*********					
331-337	CENSUS '59 INCOME		POSTED CCDB '67	1960	12/71
338-344	CENSUS '49 INCOME	IN THOUSANDS	DMI,13-20	1950	11/71
345-350	ACTIVE NON-FED D.O.'S	TOTAL FOR '71	OSTEO,47,30 & 79	1971	6/73
*********					
354-359	1969 M.D.'S	ACTIVE, NON-FEDERAL	POSTED, AMA-DIST '69	1969	8/71
360-365	1971 M.D.'S	ACTIVE, NON-FEDERAL	POSTED, AMA-DIST '71	1971	5/73
366-371	1960 M.D.'S	ACTIVE, NON-FEDERAL	DMI,67-71	1960	11/71
372-377	1950 M.D.'S	ACTIVE, NON-FEDERAL	DMI,30-34	1950	11/71
378-383	1940 M.D.'S	ACTIVE, NON-FEDERAL	DMI,58-62	1940	11/71
384-389	GEN PRACT M.D.'S	ACTIVE, NON-FEDERAL, '69	DIST OF PHYS IN U.S. '69	1969	8/71
390-395	1970 M.D.'S	ACTIVE, NON-FEDERAL	POSTED, AMA-DIST '70	1970	7/72
396-399	OSTEOPATHS/PRIMARY PATIENT CARE	UNDER 65 YEARS OLD	OSTEO,79 & 40/41	1971	6/73
400-403	OSTEOPATHS/PRIMARY PATIENT CARE	65 YEARS OLD & OVER	OSTEO,79 & 40/41	1971	6/73
404-407	TOTAL OSTEOPATHS	TOTAL, FOR '71	OSTEO,79	1971	6/73
*********					
470-473	TOTAL DENTISTS	TOTAL, CIVILIAN, FOR '68	DDH,72-75	1968	6/71
474-477	LICENSED DENTISTS	'71, EXCEPT--IND '69, PA '68	DENTAL REGISTER	1971	10/72
*********					
484-489	# OFFICE-PATIENT CARE OPTOM	ACTIVE, FOR '68	OPTOM TAPE,34 & 45-47	1968	11/72
558-563	1972 OPTOMETRISTS	ACT, NON-FED, W/EXCEPTION	POSTED, ST & CTY DIST OPTM	1972	12/72
496-501	ACT PHARMACISTS	ACTIVE, FOR '66	NCHS MAN,40-45	1966	9/71
502-507	TOTAL PODIATRISTS	TOTAL, FOR '68	NCHS MAN,64-69	1968	9/71
508-513	TOTAL VETERINARIANS	TOTAL, FOR '67	NCHS MAN,58-63	1967	9/71
514-519	ACTIVE REG NURSES	ACTIVE, FOR '66	NCHS MAN,52-57	1966	9/71
520-525	EMPL LIC PRAC NURSES	ACTIVE, FOR '67	LPN'S '67 AN INV OF LPN'S	1967	8/71
526-527	# GEN HOSPITALS	ALL AHA CODED "10-S"	HOSP FILE,19-20 & 77	1970	12/72
528-529	# SPEC HOSPITALS	ALL HOSP NOT CODED "10-S"	HOSP FILE,19-20 & 77	1970	12/72
*********					
534-535	# INTERN PROG	APPROVED ONLY	POSTED, DAIR	1971-72	9/71

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********** AREA RESOURCE FILE **********
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COL-COL	NAME	CHARACTERISTICS	SOURCE	YR DATA	DATE ON
536-537	# RESIDENCY PROG	TOTAL	POSTED, DAIR	1971-72	9/71
538-539	# FAMILY MED PROGRAMS		POSTED, DAIR	1971-72	9/71
540-541	# INTERNAL MED PROGRAMS		POSTED, DAIR	1971-72	9/71
542-543	# PEDIATRICS PROGRAMS		POSTED, DAIR	1971-72	9/71
544-545	# OB-GYN PROGRAMS		POSTED, DAIR	1971-72	9/71
546-550	INTERNSHIPS OFFERED	COUNT ADJUST FOR SHARED PROG	POSTED, DAIR	1971-72	9/71
551-555	RESIDENCIES OFFERED	COUNT ADJUST FOR SHARED PROG	POSTED, DAIR	1971-72	9/71
**********					
490-495	OPTOMETRISTS	ACTIVE, FOR '68	OPTOM TAPE,34 & 45-47	1968	11/72
**********					
566-572	# GEN HOSPITAL BEDS		HOSP FILE,19-20 & 78-83	1970	12/72
573-579	# SPEC HOSPITAL BEDS		HOSP FILE,19-20 & 78-83	1970	12/72
580-581	GEN HOSP, 001-099 BEDS		COUNT HOSP FILE	1970	12/72
582-583	GEN HOSP, 100-199 BEDS		COUNT HOSP FILE	1970	12/72
584-585	GEN HOSP, 200-299 BEDS		COUNT HOSP FILE	1970	12/72
586-587	GEN HOSP, 300-399 BEDS		COUNT HOSP FILE	1970	12/72
588-589	GEN HOSP, 400+ BEDS		COUNT HOSP FILE	1970	12/72
**********					
595-599	FULL TIME/M.D.'S	GEN HOSP EMPLOYMENT	HOSP FILE,118-123	1970	6/71
600-604	FULL TIME/D.D.S.'S	GEN HOSP EMPLOYMENT	HOSP FILE,118-123	1970	6/71
605-609	FT/INTERNS & RES (M.D. & D.D.S.)	GEN HOSP EMPLOYMENT	HOSP FILE,124-129	1970	12/72
610-614	FULL TIME/OTHER TRAINEES	GEN HOSP EMPLOYMENT	HOSP FILE,130-135	1970	12/72
615-619	FULL TIME/R.N.'S	GEN HOSP EMPLOYMENT	HOSP FILE,136-141	1970	12/72
620-624	FULL TIME/L.P.N.'S	GEN HOSP EMPLOYMENT	HOSP FILE,142-147	1970	12/72
625-629	FULL TIME/M.D.'S	NON-GEN HOSP EMPLOYMENT	HOSP FILE,118-123	1970	6/71
630-634	FULL TIME/D.D.S.'S	NON-GEN HOSP EMPLOYMENT	HOSP FILE,118-123	1970	6/71
635-639	FULL TIME/INTERNS & RES	NON-GEN HOSP EMPLOYMENT	HOSP FILE,124-129	1970	12/72
640-644	FULL TIME/OTHER TRAINEES	NON-GEN HOSP EMPLOYMENT	HOSP FILE,130-135	1970	12/72
645-649	FULL TIME/R.N.'S	NON-GEN HOSP EMPLOYMENT	HOSP FILE,136-141	1970	12/72
650-654	FULL TIME/L.P.N.'S	NON-GEN HOSP EMPLOYMENT	HOSP FILE,142-147	1970	12/72
655-662	GEN HOSP OUTPAT VISITS		HOSP FILE,19-20 & 104-111	1970	12/72
663-670	CLINIC OUTPAT VISITS	(EMERGENCY)	HOSP FILE,96-103	1970	12/72
671-678	SPEC HOSP OUTPAT VISITS	(NON-GENERAL)	HOSP FILE,19-20 & 104-111	1970	12/72
**********					
684-685	M.D. SCHOOLS		COUNT TRAIN FILE	1967-68	9/71
686-687	D.D.S. SCHOOLS		COUNT TRAIN FILE	1970-71	9/71
688-689	R.N. SCHOOLS		COUNT TRAIN FILE	1970-71	9/71
690-691	L.P.N. SCHOOLS		COUNT TRAIN FILE	1970-71	9/71
692-693	OPTOMETRY SCHOOLS		COUNT TRAIN FILE	1967-68	9/71
694-695	PHARMACY SCHOOLS		COUNT TRAIN FILE	1968	9/71
696-697	PODIATRY SCHOOLS		COUNT TRAIN FILE	1967-68	9/71
698-699	VETERINARY SCHOOLS		COUNT TRAIN FILE	1968-70	9/71

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********** AREA RESOURCE FILE **********
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COL-COL	NAME	CHARACTERISTICS	SOURCE	YR DATA	DATE ON
700-702	MED AUXILIARY SCHOOLS		COUNT TRAIN FILE		9/71
703-704	DENTAL AUXILIARY SCHOOLS		COUNT TRAIN FILE	1970-71	9/71
705-706	D.O. SCHOOLS		COUNT TRAIN FILE	1967-68	9/71
*********					
713-716	D.O. ENROLLMT		COUNT TRAIN FILE	1967-68	9/71
717-720	M.D. ENROLLMT		COUNT TRAIN FILE	1967-68	9/71
721-724	D.D.S. ENROLLMT		COUNT TRAIN FILE	1970-71	9/71
725-728	R.N. ENROLLMT		COUNT TRAIN FILE	1970-71	9/71
729-732	L.P.N. ENROLLMT		COUNT TRAIN FILE	1970-71	9/71
733-735	OPTOMETRY ENROLLMT		COUNT TRAIN FILE	1967-68	9/71
736-738	PHARMACY ENROLLMT		COUNT TRAIN FILE	1968	9/71
739-740	PODIATRY ENROLLMT		COUNT TRAIN FILE	1967-68	9/71
741-744	VETERINARY ENROLLMT		COUNT TRAIN FILE	1968-70	9/71
745-748	DENTAL AUX ENROLLMT		COUNT TRAIN FILE	1970-71	9/71
749-752	MED AUX PROG CAPACITY DATA		COUNT TRAIN FILE		9/71
*********					
756-758	GRAD OF D.O. SCHOOLS		COUNT TRAIN FILE	1968	9/71
759-761	GRAD OF M.D. SCHOOLS		COUNT TRAIN FILE	1968	9/71
762-764	GRAD OF D.D.S. SCHOOLS		COUNT TRAIN FILE	1971	9/71
765-767	GRAD OF R.N. SCHOOLS		COUNT TRAIN FILE	1970	9/71
768-770	GRAD OF L.P.N. SCHOOLS		COUNT TRAIN FILE	1970	9/71
771-773	GRAD OF OPTOMETRY SCHOOLS		COUNT TRAIN FILE	1968	9/71
774-776	GRAD OF PHARMACY SCHOOLS		COUNT TRAIN FILE	1968	9/71
777-779	GRAD OF PODIATRY SCHOOLS		COUNT TRAIN FILE	1968	9/71
780-782	GRAD OF VETERINARY SCHOOLS		COUNT TRAIN FILE	1969	9/71
783-785	GRAD OF DENTAL AUX SCHOOLS		COUNT TRAIN FILE	1971	9/71
786-791	ADPC RECIPIENTS		POSTED,NCSS REPORT A-8	1970	9/71
*********					
798-799	# UNIVERSITIES		COUNT OE TAPE	1970	7/71
800-801	# COLLEGES		COUNT OE TAPE	1970	7/71
802-803	#JR COLLEGES		COUNT OE TAPE	1970	7/71
804-808	TOTAL MORTALITY	BY PLACE OF RESIDENCE	NCHS MORT,24-29	1968	8/71
809-813	INFANT MORTALITY	UNDER 1 YR OLD	NCHS MORT,30-35	1968	8/71
814-818	INFEC & PARAS MORTALITY	FOR CAUSES #001-138	NCHS MORT,121-124	1968	8/71
819-826	OUTPAT VIS TO GEN HOSP	TOTAL, FOR '69	HOSP FILE,251-258	1969	6/71
827-831	BIRTHS IN HOSPITAL		NCHS NATALITY,23-28	1968	7/71
832-836	TOTAL BIRTHS		NCHS NATALITY,17-22	1968	7/71
837-842	ADPC RECIPIENTS		POSTED, NCSS REPORT A-8	1972	4/73
843-849	INPAT DAYS IN GEN HOSP	TOTAL, FOR '70	HOSP FILE,227-232	1970	12/72
850-856	INPAT DAYS IN GEN HOSP	TOTAL, FOR '69	HOSP FILE,221-226	1969	12/72
857-858	# HOSP WITH INTENSIVE CARE		HOSP FILE,155	1970-71	12/72

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********** AREA RESOURCE FILE **********
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COL-COL	NAME	CHARACTERISTICS	SOURCE	YR DATA	DATE ON
					12/72
859-860	# HOSP WITH INTENSIVE CARDIAC		HOSP FILE,156	1970-71	12/72
861-862	# HOSP WITH OPEN HEART SURGERY		HOSP FILE,157	1970-71	12/72
863-864	# HOSP WITH POST-OP RECOV ROOM		HOSP FILE,154	1970-71	12/72
865-866	# HOSP WITH PRE-MATURE NURSERY		HOSP FILE,169	1970-71	12/72
867-868	# HOSP WITH X-RAY THERAPY		HOSP FILE,160	1970-71	12/72
869-870	# HOSP WITH COBALT THERAPY		HOSP FILE,161	1970-71	12/72
871-872	# HOSP WITH RADIUM THERAPY		HOSP FILE,162	1970-71	12/72
873-874	# HOSP WITH RADIOISO THERAPY		HOSP FILE,163	1970-71	12/72
875-876	# HOSP WITH HISTOPATHOLOGY LAB		HOSP FILE,164	1970-71	12/72
877-878	# HOSP WITH ORGAN BANK		HOSP FILE,165	1970-71	12/72
879-880	# HOSP WITH BLOOD BANK		HOSP FILE,166	1970-71	12/72
881-882	# HOSP WITH ELECTRO-ENCEPHLO		HOSP FILE,167	1970-71	12/72
883-884	# HOSP WITH PHYSICAL THERAPY		HOSP FILE,174	1970-71	12/72
885-886	# HOSP WITH OCCUPAT THERAPY		HOSP FILE,175	1970-71	12/72
887-888	# HOSP WITH INHALATION THERAPY		HOSP FILE,168	1970-71	12/72
889-890	# HOSP WITH FULL-TIME PHARM		HOSP FILE,158	1970-71	12/72
891-892	# HOSP WITH PART-TIME PHARM		HOSP FILE,159	1970-71	12/72
893-894	# HOSP WITH DENTAL SERVICE		HOSP FILE,188	1969-70	12/72
895-896	# HOSP WITH DIALYSIS-INPATIENT		HOSP FILE,172	1970-71	12/72
897-898	# HOSP WITH DIALYSIS-OUTPATIENT		HOSP FILE,173	1970-71	12/72
899-900	# HOSP WITH SELF CARE UNIT		HOSP FILE,170	1970-71	12/72
901-902	# HOSP W/PSYCH FOSTER/HOME CARE		HOSP FILE,182	1970-71	12/72
903-904	# HOSP WITH PSYCH INPATIENT		HOSP FILE,178	1970-71	12/72
905-906	# HOSP WITH PSYCH OUTPATIENT		HOSP FILE,179	1970-71	12/72
907-908	# HOSP WITH PSYCH PARTIAL HOSP		HOSP FILE,180	1970-71	12/72
909-910	# HOSP WITH PSYCH EMERGENCY		HOSP FILE,181	1970-71	12/72
911-912	# HOSP WITH SOCIAL WORK DEPT		HOSP FILE,183	1970-71	12/72
913-914	# HOSP WITH FAMILY PLANNING		HOSP FILE,184	1970-71	12/72
915-916	# HOSP WITH EXTENDED CARE		HOSP FILE,171	1970-71	12/72
917-918	# HOSP WITH REHABIL INPATIENT		HOSP FILE,176	1970-71	12/72
919-920	# HOSP WITH REHABIL OUTPATIENT		HOSP FILE,177	1970-71	12/72
921-922	# HOSP WITH HOME CARE UNIT		HOSP FILE,185	1970-71	12/72
923-924	# HOSP WITH HOSPITAL AUXILIARY		HOSP FILE,186	1970-71	12/72
925-926	# HOSP WITH ORGANIZED OUTPATIENT		HOSP FILE,187	1970-71	12/72
927-931	GEN MED RESIDENCIES	ADJ TO UNDUP SHARED PROG	POSTED, DAIR	1971-72	9/71
932-936	INTERNAL MED RESIDENCIES	ADJ TO UNDUP SHARED PROG	POSTED, DAIR	1971-72	9/71
937-941	PEDIATRIC RESIDENCIES	ADJ TO UNDUP SHARED PROG	POSTED, DAIR	1971-72	9/71
942-946	OB & GYN RESIDENCIES	ADJ TO UNDUP SHARED PROG	POSTED, DAIR	1971-72	9/71
947-949	CONTINUING EDUCATION COURSES		POSTED, JAMA, 8/4/69	1969	2/72
950-951	VET HOSP BY "GO" CAT I	READY, BUT FOR TOP STAFF	ENDICOTT MEMO,3/18/71	1971	11/71

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********** AREA RESOURCE FILE **********
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COL-COL	NAME	CHARACTERISTICS	SOURCE	YR DATA	DATE ON
952-953	VET HOSP BY "GO" CAT II	MOD CHGE IN FAC, STAFF	ENDICOTT MEMO,3/18/71	1971	11/71
954-955	VET HOSP BY "GO" CAT III	MAJ CHGE IN II & PATIENT	ENDICOTT MEMO,3/18/71	1971	11/71
956-957	VET HOSP BY "GO" CAT IV	SOME POSSIBILITY	ENDICOTT MEMO,3/18/71	1971	11/71
958-959	VET HOSP BY "GO" CAT V	ALL OTHER	ENDICOTT MEMO,3/18/71	1971	11/71
960-961	DIST GEN HOSP BY 00 - 69% UTIL		COUNT HOSP FILE	1970	12/72
962-963	DIST GEN HOSP BY 70 - 79% UTIL		COUNT HOSP FILE	1970	12/72
964-965	DIST GEN HOSP BY 80 - 89% UTIL		COUNT HOSP FILE	1970	12/72
966-967	DIST GEN HOSP BY 90+% UTIL		COUNT HOSP FILE	1970	12/72
968-969	DIST GEN HOSP BY 00 - 04 SER		COUNT HOSP FILE	1970	12/72
970-971	DIST GEN HOSP BY 05 - 14 SER		COUNT HOSP FILE	1970	12/72
972-973	DIST GEN HOSP BY 15 - 24 SER		COUNT HOSP FILE	1970	12/72
974-975	DIST GEN HOSP BY 25+ SERVICES		COUNT HOSP FILE	1970	12/72
976-981	TOT HOSP EXPENDITURES	FOR ALL HOSPITALS	COUNT HOSP FILE	1970	6/71
982-983	GEN HOSP/MAJOR EMERG SER		HOSP TAPE,301	1970	12/72
984-985	GEN HOSP/BASIC EMERG SER		HOSP TAPE,302	1970	12/72
986-987	GEN HOSP/MINOR EMERG SER		HOSP TAPE,303	1970	12/72
988-989	GEN HOSP/REFERRAL EMERG SER		HOSP TAPE,304	1970	12/72
*********					

END

********* = BLANK COLUMNS

SOURCES:

AGRI	= 1969 CENSUS OF AGRICULTURE TAPE.
CCDB	= CITY & COUNTY DATA BOOK.
DAIR	= DIRECTORY OF APPROVED INTERSHIPS & RESIDENCIES, 1971-72.
DDH	= DIV OF DENTAL HEALTH TAPE.
DMI	= DMI HISTORIC DATA CARDS.
GICS	= GEOGRAPHIC IDENTIFICATION CODE SCHEME, U.S. DEPT. OF COMMERCE.
SM	= SALES MANAGEMENT TAPE.
OSTEO	= 1971 AMERICAN OSTEOPATHIC ASSOC. TAPE.
POP	= 1970 CENSUS POPULATION TAPE.
'70 CENSUS OF POP	= 1970 CENSUS OF POPULATION, U.S. DEPT. COMMERCE, NUMBER OF INHABITANTS (BY STATES).
4TH COUNT	= 1970 CENSUS FOURTH-COUNT POPULATION SUMMARY TAPE.
ST & CTY DIST OPTM	= STATE AND COUNTY DISTRIBUTION OF ACTIVE, NON-FEDERAL OPTOMETRISTS, 10/31/72, NIH 71-4173.

RECORD LENGTH = 999
DSN = AHECMAST
BLOCKSIZE = 4995
DATE: 9/73

APPENDIX B:

USER DOCUMENTATION

FOR THE

DMI AREA RESCURCE FILE (ARF)

AS OF JULY, 1973

ARF USER COCUMENTATION

CONTENTS

		PAGE
1.	CODES AND CLASSIFICATIONS	48
	1-A) STATE AND COUNTY CODES	
	1-B) CITY SIZE AND SMSA CODES	
	1-C) ECONOMIC AREA CODES	
	1-D) FEDERAL REGION CODES	
2.	LAND AREA	53
3.	POPULATION ESTIMATES	53
4.	LARGE ANIMAL POPULATION	54
5.	INCOME ESTIMATES	54
	5-A) PERSONAL INCOME	
	5-B) HOUSEHOLD INCOME LEVELS	
	5-C) AID TO DEPENDENT CHILDREN RECIPIENTS	
6.	HEALTH MANPOWER TRAINING DATA	54
	6-A) INTERNS AND RESIDENCIES	
	6-B) PROFESSIONAL SCHOOLS AND PROGRAMS	
	6-C) OTHER SCHOOLS AND PROGRAMS	
7.	HIGHER EDUCATION DATA	57
8.	HEALTH MANPOWER DATA	57
	8-A) PHYSICIANS	
	8-B) OTHER PROFESSIONAL MANPOWER	
	8-C) NURSES	
9.	HOSPITAL DATA	59
	9-A) HOSPITAL TYPE	
	9-B) HOSPITAL EMPLOYMENT	
	9-C) OTHER DATA	
10.	VITAL STATISTICS DATA	61
11.	CHANGES IN DEFINITION IN PAST YEAR	61

1. CODES AND CLASSIFICATIONS

1-A) STATE AND COUNTY CODES:

FIPS STATE CODE:

THIS CODE WAS ESTABLISHED BY NATIONAL BUREAU OF STANDARDS, U.S. DEPARTMENT OF COMMERCE IN 1968. IT IS STANDARD THROUGHOUT THE FEDERAL GOVERNMENT AND PUBLISHED IN "FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATION JUNE 15, 1970". THE BASIC STRUCTURE IS A SEQUENTIAL ASCENDING TWO DIGIT NUMBER, WITH SPACES FOR ALL POSSIBLE NEW STATES.

GSA 1967 STATE CODES:

THIS CODE PRECEDED FIPS. LIKE FIPS, THE BASIC STRUCTURE OF STATE CODES IS A SEQUENTIAL ASCENDING TWO-DIGIT NUMBER; HOWEVER, NO SPACES ARE INCLUDED FOR ADDITIONS. ALASKA AND HAWAII ARE LISTED AS STATES 50 AND 51 RATHER THAN IN ALPHABETICAL ORDER. THE GSA - 1967 CODES ARE ON THE FILE FOR INDEXING ONLY.

MODIFIED FIPS COUNTY CODES:

THE FIPS COUNTY CODES WERE ESTABLISHED BY NATIONAL BUREAU OF STANDARDS, U.S. DEPARTMENT OF COMMERCE IN 1968. IT IS STANDARD THROUGHOUT THE FEDERAL GOVERNMENT AND PUBLISHED IN "FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATION JUNE 15, 1970". THE BASIC STRUCTURE IS SEQUENTIAL, ASCENDING, THREE-DIGIT ODD NUMBERS.

THE COUNTY CODES USED IN THE AREA RESOURCE FILE ARE THOSE PUBLISHED IN FIPS EXCEPT THAT CERTAIN INDEPENDENT CITIES HAVE BEEN RECODED. NO COUNTY CODES HAVE BEEN ENTERED FOR ALASKA AND HAWAII SINCE IT IS EXPECTED THAT IN ANALYSIS THEY WILL ALWAYS BE HANDLED IN THEIR ENTIRETY.

INDEPENDENT CITIES OF VIRGINIA WERE INCLUDED IN THEIR ORIGINAL COUNTIES BECAUSE MUCH OF THE DATA IN THE FILE WAS ONLY AVAILABLE FOR COUNTIES AND COULD NOT BE SEPARATED INTO COUNTY AND INDEPENDENT CITY SEGMENTS. THEREFORE, CITIES HAVE BEEN RECODED INTO COUNTIES IN ALL CASES FOR CONSISTENCY OF DATA. THE RECODINGS MADE BY OMI ARE AS FOLLOWS:

		OMI MODIFIED FIPS	FIPS
BALTIMORE	MARYLAND	007	510
ST. LOUIS CITY	MISSOURI	191	510
CARSON CITY (ORMSBY COUNTY)	NEVADA	025	510

ALLOCATION OF VIRGINIA INDEPENDENT CITIES TO COUNTIES

CITY	ORIGINAL COUNTIES	DMI MODIFIED FIPS	FIPS
ALEXANDRIA	ARLINGTON	013	510
BRISTOL	WASHINGTON	191	520
BUENA VISTA	ROCKBRIDGE	163	530
CHARLOTTESVILLE	ABLEMARLE	003	540
CHESAPEAKE	NORFOLK	129*	550
CLIFTON FORGE	ALLEGHANY	005	560
COLONIAL HEIGHTS	CHESTERFIELD	041	570
COVINGTON	ALLEGHANY	005	580
DANVILLE	PITTSYLVANIA	143	590
EMPORIA	GREENSVILLE	081	595
FAIRFAX	FAIRFAX	059	600
FALLS CHURCH	FAIRFAX	059	610
FRANKLIN	SOUTHAMPTON	175	620
FREDERICKSBURG	SPOTSYLVANIA	177	630
GALAX	GRAYSON	077	640
HAMPTON	ELIZABETH CITY	055**	650
HARRISONBURG	ROCKINGHAM	165	660
HOPEWELL	PRINCE GEORGE	149	670
LEXINGTON	ROCKBRIDGE	163	678
LYNCHBURG	CAMPBELL	031	680
MARTINSVILLE	HENRY	089	690
NEWPORT NEWS	ELIZABETH CITY	055**	700
NORFOLK	NORFOLK	129*	710
NORTON	WISE	195	720
PETERSBURG	DINWIDDIE	053	730
PORTSMOUTH	NORFOLK	129*	740
RADFORD	MONTGOMERY	121	750
RICHMOND	HENRICO	087	760
ROANOKE	ROANOKE	161	770
SALEM	ROANOKE	161	775
SOUTH BOSTON	HALIFAX	083	780
STAUNTON	AUGUSTA	015	790
SUFFOLK	NANSEMOND	123	800
VIRGINIA BEACH	NORFOLK	129*	810
WAYNESBORO	AUGUSTA	015	820
WILLIAMSBURG	JAMES CITY	095	830
WINCHESTER	FREDERICK	069	840

*FIPS DOES NOT HAVE A CODE FOR NORFOLK SINCE IT IS NO LONGER A COUNTY. DMI HAS DESIGNATED A NORFOLK COUNTY TO INCLUDE THE INDEPENDENT CITIES WHICH NOW INCLUDE ALL OF THE PREVIOUS NORFOLK COUNTY.

**FIPS DOES NOT HAVE A CODE FOR ELIZABETH CITY SINCE IT IS NO LONGER A COUNTY. DMI HAS DESIGNATED AN ELIZABETH CITY COUNTY TO INCLUDE THE INDEPENDENT CITIES WHICH NOW INCLUDE ALL OF THE PREVIOUS ELIZABETH CITY COUNTY.

1-B) CITY SIZE CODE:

THIS IS AN ARBITRARY ASSIGNED CODE AND IT HAS THE FOLLOWING STRUCTURE:

EACH STANDARD METROPOLITAN STATISTICAL AREA MUST INCLUDE ONE CITY WITH 50,000 OR MORE INHABITANTS OR TWO ADJACENT CITIES WITH A COMBINED POPULATION OF 50,000 OR MORE. THE CENTRAL CITY MUST IDENTIFY WITH THE COUNTY IN WHICH IT IS LOCATED AS THE CENTRAL COUNTY.

	CENTRAL CITY SIZE (DECENNIAL)	CITY-SIZE CODE
SMSA	1+ MILLION	11
SMSA	500K - 999K	21
SMSA	250K - 499K	31
SMSA	100K - 249K	41
SMSA	UNDER 100K	51

	NON-METROPOLITAN AREAS (1970 CENSUS)	CITY-SIZE CODE
NONMET	50K+	02
NONMET	25K - 49,999	03
NONMET	10K - 24,999	04
NONMET	5K - 9,999	05
NONMET	UNDER 4,999	06

SMSA

THIS CODE WAS ESTABLISHED BY NATIONAL BUREAU OF STANDARDS, U.S. DEPARTMENT OF COMMERCE FIRST ISSUED IN 1949 AS STANDARD METROPOLITAN AREAS. THE SMSA CODES WERE POSTED FROM "TITLES AND DEFINITIONS OF STANDARD METROPOLITAN STATISTICAL AREAS AS OF APRIL 27, 1973", PREPARED BY THE GEOGRAPHY DIVISION, BUREAU OF THE CENSUS, SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE, MAY 1, 1973 -- WITH THE EXCEPTION OF THE SMSA CODES FOR THE NEW ENGLAND STATES AND TWO COUNTIES IN VIRGINIA. IN NEW ENGLAND, SMSA'S ARE DEFINED WITH THE TOWN INSTEAD OF THE COUNTY AS THE PRIMARY UNIT. IN ORDER TO USE COUNTY FIGURES FOR NEW ENGLAND IN THE SAME MANNER AS OTHER PARTS OF THE COUNTRY WITH RESPECT TO SMSA'S, WE HAVE USED THE NEW ENGLAND METROPOLITAN STATE ECONOMIC AREAS INSTEAD OF SMSA'S. DEFINITIONS OF AND CODES FOR THESE AREAS FOLLOW:

0002 - LEWISTON, AUBURN
MAINE

ANDROSCOGGIN COUNTY

0004 - NEW LONDON, GROTON, NORWICH
CONNECTICUT

NEW LONDON COUNTY

1120 - BOSTON, LAWRENCE, HAVERHILL, LOWELL
MASSACHUSETTS

ESSEX COUNTY
MIDDLESEX COUNTY
NORFOLK COUNTY
SUFFOLK COUNTY

1160 - BRIDGEPORT, STAMFORD, NORWALK, DANBURY
CONNECTICUT

FAIRFIELD COUNTY

1200 - BROCKTON
MASSACHUSETTS

PLYMOUTH COUNTY

2480 - FALL RIVER, NEW BEDFORD
MASSACHUSETTS

BRISTOL COUNTY

3280 - HARTFORD, NEW BRITAIN, BRISTOL
CONNECTICUT

HARTFORD COUNTY

4760 - MANCHESTER
NEW HAMPSHIRE

HILLSBOROUGH COUNTY

5480 - NEW HAVEN, WATERBURY, MERIDEN
CONNECTICUT

NEW HAVEN COUNTY

6320 - PITTSFIELD
MASSACHUSETTS

BERKSHIRE COUNTY

6400 - PORTLAND
MAINE

CUMBERLAND COUNTY

6480 - PROVIDENCE, PAWTUCKET, WARWICK
RHODE ISLAND

BRISTOL COUNTY
KENT COUNTY
PROVIDENCE COUNTY

8000 - SPRINGFIELD, CHICOPEE, HOLYOKE
MASSACHUSETTS

HAMPSHIRE COUNTY
HAMPTDEN COUNTY

9240 - WORCESTER, FITCHBURG, LEOMINSTER
MASSACHUSETTS

WORCESTER COUNTY

VIRGINIA SMSA'S ARE:

6140 - PETERSBURG, HOPEWELL
VIRGINIA

DINWIDDIE COUNTY
HOPEWELL CITY
PETERSBURT CITY
PRINCE GEORGES COUNTY

6760 - RICHMOND
VIRGINIA

CHESTERFIELD COUNTY
HANOVER COUNTY
HENRICO COUNTY
RICHMOND CITY

1-C) ECONOMIC AREA CODES

RANALLY MAJOR AREA CODE

DMI ASSIGNED CODE NUMBERS TO THE FIFTY MAJOR TRADING AREAS BY AN ALPHABETICAL LISTING IN THE "TRADING AREA MANUAL, A SUPPLEMENTAL TO THE RANALLY TRADING AREA MAP OF THE UNITED STATES", COPYRIGHT 1963 BY RAND MCNALLY & COMPANY.

RANALLY MINOR AREA CODE

THIS CODE WAS ESTABLISHED FROM A TRADING AREA MAP BY RAND MCNALLY & COMPANY. THERE ARE 494 BASIC TRADING AREAS. THESE ARE INDICATED BY NUMBERS KEYED TO THE ALPHABETICAL LIST AT THE BOTTOM OF THE MAP.

OBE ECONOMIC AREA CODE

THIS CODE IS DELINEATED BY THE REGIONAL ECONOMICS DIVISION, OFFICE OF BUSINESS ECONOMICS, U.S. DEPARTMENT OF COMMERCE, REVISED JANUARY 1969. THE AREAS ARE NAMED FOR THE LARGEST SMSA OR, WHERE THERE IS NO SMSA, FOR THE LARGEST CITY. THIS ECONOMIC AREA MAP CONTAINS 173 AREAS THAT ARE INDICATED BY NUMBERS KEYED TO THE ALPHABETICAL LIST AT THE SIDES AND AT THE BOTTOM OF THIS MAP. IN CONTRAST TO OTHER ECONOMIC AREAS, THESE AREAS ARE PREDOMINANTLY BASED ON COMMUTING PATTERNS DERIVED FROM THE 1960 CENSUS PLACE-OF-WORK DATA (SEE "CENSUS WORKING PAPER #28" FOR FURTHER INFORMATION).

1-D) FEDERAL REGION CODES

THESE ARE THE CODES FOR THE 10 FEDERAL REGIONAL OFFICES. THE REGIONAL OFFICE AND STATES WITHIN EACH REGION ARE AS FOLLOWS:

01 = BOSTON R.O. (MAINE, VERMONT, MASS., CONN., R.I., N.H.)
02 = NEW YORK R.O. (N.Y., N.J., PUERTO RICO, VIRGIN ISLANDS)
03 = PHILADELPHIA R.O. (PENN., DEL., D.C., MARYLAND, VA., W. VA.)
04 = ATLANTA R.O. (ALA., FLA., GEORGIA, KY., MISS., N.C., S.C., TENN.)
05 = CHICAGO R.O. (ILL., INDIANA, MINN., MICHIGAN, OHIO, WISCONSIN)
06 = DALLAS R.O. (ARKANSAS, N.M., OKLAHOMA, TEXAS, LOUISIANA)
07 = KANSAS CITY R.O. (IOWA, KANSAS, MISSOURI, NEBRASKA)
08 = DENVER R.O. (COLO., MONTANA, N.D., S.D., UTAH, WYOMING)
09 = SAN FRANCISCO R.O. (ARIZ., CALIF., HAWAII, NEV., TRUST TERRITORIES)
10 = SEATTLE R.O. (ALASKA, IDAHO, OREGON, WASHINGTON)

2. LAND AREA

LAND AREA IN SQUARE MILES COMES FROM "COUNTY AND CITY DATA BOOK 1967", A STATISTICAL ABSTRACT SUPPLEMENT PUBLISHED BY BUREAU OF THE CENSUS, U.S. DEPARTMENT OF COMMERCE.

3. POPULATION ESTIMATES

CENSUS POPULATION COUNTS ARE PUBLISHED IN: "SIXTEENTH CENSUS OF THE U.S. 1940, POPULATION VOLUME I, NUMBER OF INHABITANTS"; "1950 CENSUS OF POPULATION, VOLUME I, NUMBER OF INHABITANTS"; "CENSUS OF POPULATION 1960, THE EIGHTEENTH DECENNIAL CENSUS OF THE UNITED STATES"; AND "1970 CENSUS OF POPULATION, U.S. DEPARTMENT OF COMMERCE PUBLICATION, NUMBER OF INHABITANTS (BY STATES)". THE SEX AND AGE DATA DO NOT NECESSARILY ADD TO TOTAL DUE TO EXCLUSION OF PERSONS OF UNKNOWN AGE. THE NUMBER OF HOUSEHOLDS ALSO COMES FROM THE 1970 CENSUS.

URBAN POPULATION IS FROM THE 1970 CENSUS FOURTH-COUNT POPULATION SUMMARY TAPE.

TOTAL POPULATION AND NUMBER OF HOUSEHOLDS DATA PUBLISHED IN SALES MANAGEMENT'S ANNUAL "SURVEY OF BUYING POWER" FOR 1970 ARE KEPT ON THE FILE BUT ARE NOT USED IN TABULATIONS.

4. LARGE ANIMAL POPULATION

LARGE ANIMAL POPULATION DATA ON THE NUMBER OF HOGS, CATTLE AND SHEEP ARE FROM THE 1969 CENSUS OF AGRICULTURE. THIS DATA IS PUBLISHED BY THE U.S. BUREAU OF THE CENSUS.

5. INCOME ESTIMATES

5-A) PERSONAL INCOME

PERSONAL INCOME DATA ARE A TOTAL OF AGGREGATE INCOME OF FAMILIES PLUS AGGREGATE INCOME OF UNRELATED INDIVIDUALS 14 YEARS OLD AND OVER. THIS DATA WAS TALLIED FROM THE 1970 CENSUS FOURTH-COUNT POPULATION SUMMARY TAPE.

**NOTE: TOTALS DO NOT INCLUDE INCOME FOR INMATES OF INSTITUTIONS.

5-B) HOUSEHOLD INCOME LEVELS

DISTRIBUTION OF HOUSEHOLDS DATA, BY INCOME, ARE ALSO A TOTAL OF AGGREGATE INCOME OF FAMILIES, PLUS AGGREGATE INCOME OF UNRELATED INDIVIDUALS 14 YEARS OLD AND OVER. THIS DATA WAS ALSO TALLIED FROM THE 1970 CENSUS FOURTH-COUNT POPULATION SUMMARY TAPE.

**NOTE: TOTALS DO NOT INCLUDE INCOME FOR INMATES OF INSTITUTIONS.

5-C) AID TO DEPENDENT CHILDREN RECIPIENTS

AID TO DEPENDENT CHILDREN DATA IS PUBLISHED IN NCSS REPORT A-8 (2/70) & (2/72), "RECIPIENTS OF PUBLIC ASSISTANCE MONEY PAYMENTS AND AMOUNTS OF SUCH PAYMENTS, BY PROGRAM, STATE AND COUNTY".

**NOTE: ADPC AMOUNTS FOR NEW YORK CITY WHICH IS COMPRISED OF THE BRONX, KINGS, QUEENS, NEW YORK AND RICHMOND COUNTIES, HAVE BEEN TOTALED INTO NEW YORK COUNTY. A BREAKDOWN OF AMOUNTS FOR EACH OF THE ABOVE COUNTIES IS NOT AVAILABLE.

6. HEALTH MANPOWER TRAINING DATA

HEALTH MANPOWER TRAINING CONSISTS OF THREE KINDS OF DATA: HEALTH OCCUPATION SCHOOLS BY PROGRAM TYPE, TOTAL ENROLLMENT, AND GRADUATES. THE DATA IS KEPT BY INDIVIDUAL PROGRAMS AND UNLESS STATED OTHERWISE IS AVAILABLE FOR THE THREE CATEGORIES, AND IS PUBLISHED IN "HEALTH RESOURCES STATISTICS, NCHS" WITH FEW EXCEPTIONS SPECIFICALLY SOURCED.

6-A) INTERNS AND RESIDENCIES (M.D.):

INTERNSHIPS AND RESIDENCIES OFFERED ARE FOUND IN "DIRECTORY OF APPROVED INTERNSHIPS AND RESIDENCIES 1971 - 72". THESE INCLUDE ONLY PROGRAMS ACCREDITED BY THE AMA AND DATA ARE FOR POSITIONS OFFERED. FILLED POSITIONS ARE SUBSTANTIALLY FEWER, BUT INDIVIDUAL HOSPITAL DATA ARE NOT AVAILABLE. WHERE PROGRAMS WERE SHARED OR OFFERED BY A CONSORTIA, ALL COOPERATING HOSPITALS ARE CREDITED WITH A PROGRAM IN THAT SPECIALTY BUT THE PROGRAM IS COUNTED ONLY TO THE COUNT OF THE FIRST HOSPITAL LISTED. THE FAMILY MEDICINE SPECIALTY CATEGORY INCLUDES TWO AMA SPECIALTIES, THE FAMILY MEDICINE AND GENERAL PRACTICE SPECIALTIES. THE "TOTAL" FIGURE IS THE TOTAL FOR ALL RESIDENCIES, NOT JUST THE FOUR BROKEN OUT INDIVIDUALLY. THE CODING CRITERIA WERE:

1. INDEPENDENT PROGRAMS ARE ALWAYS REPORTED.
2. SHARED PROGRAMS ARE SHOWN AS SUCH WHEN THERE ARE NO INDEPENDENT PROGRAMS.
3. SHARED PROGRAMS ARE REPORTED IN AT LEAST ONE OF THE PARTICIPATING HOSPITALS, IF NECESSARY, AS AN ENLARGEMENT OF AN INDEPENDENT PROGRAM.
4. WHILE UNIVERSITY PROGRAMS ARE LUMPED WITH THE UNIVERSITY HOSPITAL WHERE POSSIBLE, ALL OTHER NON-HOSPITAL RESIDENCIES ARE NOT INCLUDED.

INTERNS AND RESIDENCIES D.O.:

INTERNS AND RESIDENCIES APPROVED BY THE AOA FOR 1971 ARE FOUND IN "EDUCATIONAL SUPPLEMENT", JANUARY 1972 PUBLISHED BY THE OFFICE OF EDUCATION OF AMERICAN OSTEOPATHIC ASSOCIATION.

6-B) PROFESSIONAL SCHOOLS AND STUDENTS

MEDICAL SCHOOLS, ENROLLMENT AND GRADUATES:

MEDICAL SCHOOLS AND ENROLLMENT FOR 1967 - 68 AND GRADUATES FOR 1968 ARE FOUND IN "MEDICAL EDUCATION IN THE UNITED STATES 1969 - 1970", PUBLISHED BY THE AMERICAN MEDICAL ASSOCIATION.

OSTEOPATHIC SCHOOLS, ENROLLMENT AND GRADUATES:

OSTEOPATHIC SCHOOLS AND ENROLLMENT FOR 1967 - 68 AND GRADUATES FOR 1968 ARE FOUND IN "EDUCATIONAL SUPPLEMENT" OF JOURNAL OF THE AMERICAN OSTEOPATHIC ASSOCIATION JANUARY 1968 - 69.

DENTAL SCHOOLS, ENROLLMENT AND GRADUATES:

THE NUMBER OF DENTAL SCHOOLS AND THEIR ENROLLMENT FOR 1970 - 71 AND GRADUATES FOR 1971 ARE FOUND IN "ANNUAL REPORT ON DENTAL EDUCATION 1970 - 71" PUBLISHED BY AMERICAN DENTAL ASSOCIATION.

OPTOMETRY SCHOOLS, ENROLLMENT AND GRADUATES:

OPTOMETRY SCHOOLS AND THEIR ENROLLMENT FOR 1967 - 68 AND THE NUMBER OF GRADUATES IN 1968 ARE OBTAINED FROM AMERICAN OPTOMETRIC ASSOCIATION.

PHARMACY SCHOOLS, ENROLLMENT AND GRADUATES:

PHARMACY SCHOOLS ARE OBTAINED FROM AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY. ENROLLMENT FOR AND GRADUATES FOR 1968 ARE OBTAINED FROM AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY: AMERICAN JOURNAL OF PHARMACEUTICAL EDUCATION VOL. 33, NO. 1, FEBRUARY 1969.

PODIATRY SCHOOLS, ENROLLMENT AND GRADUATES:

PODIATRY SCHOOLS AND THEIR ENROLLMENT FOR 1967 - 68 AND GRADUATES FOR 1968 ARE OBTAINED FROM AMERICAN ASSOCIATION OF COLLEGES OF PODIATRIC MEDICINE.

VETERINARY MEDICINE SCHOOLS, ENROLLMENTS AND GRADUATES:

VETERINARY SCHOOLS OF MEDICINE AND THEIR ENROLLMENT FOR 1968 - 70 AND GRADUATES FOR 1969 ARE OBTAINED FROM DEPARTMENT OF EDUCATION AND LICENSURE: J.A.V.M.A. 154 (5) CHICAGO. AMERICAN VETERINARY MEDICAL ASSOCIATION FEBRUARY 1970. ALSO PRIOR ANNUAL ISSUES FOR ENROLLMENT AND GRADUATES.

SCHOOLS OF NURSING - RN, ENROLLMENT AND GRADUATES:

THE SCHOOLS OF NURSING, RN AND THEIR ENROLLMENT FOR 1970 - 71 AND GRADUATES FOR 1970* ARE FOUND IN "STATE APPROVED SCHOOLS OF NURSING - RN 1971" PUBLISHED BY NATIONAL LEAGUE FOR NURSING RESEARCH AND STUDIES SERVICE.

SCHOOLS OF NURSING - LPN, ENROLLMENT AND GRADUATES:

THE SCHOOLS OF NURSING, LPN AND THEIR ENROLLMENT FOR 1970 - 71 AND GRADUATES FOR 1970* ARE FOUND IN "STATE APPROVED SCHOOLS OF NURSING LPN/LVN 1970" PUBLISHED BY NATIONAL LEAGUE FOR NURSING, RESEARCH AND DEVELOPMENT.

*1971 ESTIMATED GRADUATES AVAILABLE

MEDICAL AUXILIARY PROGRAMS:

THERE ARE A.M.A. APPROVED EDUCATIONAL PROGRAMS IN FIFTEEN ALLIED HEALTH PROFESSIONS. ENROLLMENT AND GRADUATES ARE ESTIMATES BASED ON PROGRAMS REPORTING. ONLY CAPACITY DATA IS AVAILABLE. THE PROGRAMS ARE: CERTIFIED LABORATORY ASSISTANT, CYTOTECHNOLOGISTS, HISTOLOGIC TECHNICIAN, INHALATION THERAPY TECHNICIAN, MEDICAL ASSISTANT, MEDICAL RECORD LIBRARIAN, MEDICAL RECORD TECHNICIAN, NUCLEAR MEDICINE TECHNOLOGIST, OCCUPATIONAL THERAPIST, ORTHOPOEDIC ASSISTANT, PHYSICAL THERAPIST, RADIOLOGIC TECHNOLOGIST, AND RADIATION THERAPY TECHNICIAN.

DENTAL AUXILIARY PROGRAMS:

DENTAL AUXILIARY SCHOOLS (HYGIENE, ASSISTING, LABORATORY TECHNOLOGY) ENROLLMENT AND GRADUATES ARE FOUND IN ANNUAL REPORT ON DENTAL AUXILIARY EDUCATION 1970/71 PUBLISHED BY AMERICAN DENTAL ASSOCIATION, COUNCIL ON DENTAL EDUCATION AND DENTAL STUDENTS REGISTER PUBLISHED BY A.D.A., COUNCIL ON DENTAL EDUCATION.

7. HIGHER EDUCATION DATA

UNIVERSITY, COLLEGE, AND JR. COLLEGE DATA IS PUBLISHED IN "HIGHER EDUCATION, EDUCATION DIRECTORY 1970 - 71", NATIONAL CENTER FOR EDUCATIONAL STATISTICS OF THE OFFICE OF EDUCATION.

8. HEALTH MANPOWER DATA

DATA FOR MOST TYPES OF HEALTH MANPOWER IS FOUND IN "HEALTH MANPOWER, A COUNTY AND METROPOLITAN AREA DATA BOOK", REPORTED BY THE NATIONAL CENTER FOR HEALTH STATISTICS.

8-A) PHYSICIANS

M.D. PHYSICIANS:

CURRENT 1971 M.D.'S AS WELL AS 1970 AND 1969 M.D.'S ARE FOUND IN "DISTRIBUTION OF PHYSICIANS IN THE UNITED STATES", CENTER FOR HEALTH SERVICES RESEARCH AND DEVELOPMENT PUBLISHED BY THE AMERICAN MEDICAL ASSOCIATION IN 1971, 1970 AND 1969. THE CURRENT ESTIMATE IS FOR ACTIVE NONFEDERAL PHYSICIANS (TOTAL NONFEDERAL LESS INACTIVE). GENERAL PRACTICE PHYSICIANS ARE THOSE IN AN OFFICE-BASE PATIENT CARE WITHOUT A SPECIALTY. ESTIMATES FOR 1960, 1949, AND 1940 COME FROM AMA PUNCH CARDS. AMA ESTIMATES HAVE BEEN USED RATHER THAN CENSUS ESTIMATES BECAUSE CENSUS ESTIMATES OCCASIONALLY INCLUDED INTERNS AND RESIDENTS AS WELL AS CHIROPRACTORS, DENTISTS, AND VETERINARIANS IN THE PHYSICIAN COUNTS WHEN ENUMERATORS FAILED TO PROPERLY DIFFERENTIATE THE RESPONSE OF "DOCTOR".

D.O. PHYSICIANS:

DATA ON THE NUMBER OF 1971, ACTIVE NONFEDERAL D.O'S IS FROM THE 1971 AMERICAN OSTEOPATHIC ASSOCIATION TAPE. THIS DATA INCLUDES: TOTAL ACTIVE NONFEDERAL D.O.'S, PRIMARY PATIENT CARE D.O.'S UNDER 65 YEARS OLD, PRIMARY PATIENT CARE D.O.'S OVER 65 YEARS OLD, AND TOTAL D.O. PHYSICIANS.

8-B) OTHER PROFESSIONAL MANPOWER

DENTISTS:

TOTAL CIVILIAN DENTISTS IS FROM THE AMERICAN DENTAL ASSOCIATION DIRECTORY DATA-FILE AS OF DECEMBER 31, 1968.

TOTAL DENTISTS FOR 1971 IS FROM THE DENTAL REGISTER OF THE STATE LICENSING BOARDS FOR ALL STATES EXCEPT PENNSYLVANIA AND INDIANA.

OPTOMETRISTS:

DATA ON THE CHARACTERISTICS OF 1968 ACTIVE OPTOMETRISTS IS FROM THE 1968 VISION AND EYE CARE MANPOWER SURVEY OF OPTOMETRISTS.

CURRENT DATA ON THE NUMBER OF 1972 OPTOMETRISTS IS FROM LISTS SUPPLIED BY THE AMERICAN OPTOMETRIC ASSOCIATION. COUNTY TOTALS ARE FOR ACTIVE NONFEDERAL OPTOMETRISTS FOR ALL STATES EXCEPT THE FOLLOWING:

PENNSYLVANIA -- COUNTY TOTALS ARE FOR ALL LICENSED OPTOMETRISTS.

CALIFORNIA, ILLINOIS, MICHIGAN, MISSOURI, NEW HAMPSHIRE, NEW YORK, AND OHIO -- COUNTY TOTALS ARE FOR LICENSED, NONFEDERAL OPTOMETRISTS.

PHARMACISTS:

DATA ON THE NUMBER OF 1966 ACTIVE PHARMACISTS IS FROM A SURVEY CONDUCTED BY THE NATIONAL ASSOCIATION OF BOARDS OF PHARMACY, IN COOPERATION WITH THE NATIONAL CENTER FOR HEALTH STATISTICS. THIS WAS A QUESTIONNAIRE SENT WITH A LICENSING RENEWAL FORM TO EACH PHARMACIST AT THE APPROPRIATE RENEWAL TIME. STATE DATA ON PHARMACY IS AVAILABLE IN "PHARMACY MANPOWER U.S. 1966".

PODIATRISTS:

DATA ON THE NUMBER OF 1968 TOTAL PODIATRISTS IS FROM UNPUBLISHED STATE LICENSING LISTS PROVIDED BY THE AMERICAN PODIATRY ASSOCIATION.

VETERINARIANS:

DATA ON THE NUMBER OF 1967 TOTAL VETERINARIANS WAS PROVIDED FROM MEMBERSHIP RECORDS OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION.

8-C) NURSES

R.N.'S:

DATA ON THE NUMBER OF 1966 REGISTERED NURSES IS FROM THE 1966 INVENTORY OF REGISTERED NURSES CONDUCTED BY THE AMERICAN NURSES ASSOCIATION.

L.P.N.'S:

DATA ON THE NUMBER OF 1967 LICENSED PRACTICAL NURSES IS FROM THE 1967 INVENTORY OF LICENSED PRACTICAL NURSES CONDUCTED BY THE AMERICAN NURSES ASSOCIATION.

9. HOSPITAL DATA

ALL HOSPITAL DATA (EXCEPT INTERN AND RESIDENT TRAINING) IS FROM AN ANNUAL SURVEY OF HOSPITALS REPORTING FOR A TWELVE MONTH PERIOD PREFERRABLY OCTOBER 1, 1969 THROUGH SEPTEMBER 30, 1970. THIS DATA HAS BEEN PUT ON A NCHS HOSPITAL FACILITY TAPE, AND HAS BEEN PUBLISHED IN THE "HOSPITAL GUIDE ISSUE". A COPY OF THE QUESTIONNAIRE USED IS PUBLISHED IN THE HOSPITAL GUIDE ISSUE.

TO BE REPORTED AS A HOSPITAL, AN INSTITUTION MUST HAVE AT LEAST SIX INPATIENT BEDS, CRIBS OR PEDIATRIC BASSINETS WHICH SHALL BE CONTINUALLY AVAILABLE FOR THE CARE OF PATIENTS.

9-A) HOSPITAL TYPE

GENERAL HOSPITALS:

GENERAL HOSPITALS ARE THOSE CODED "10-S" BY THE AMERICAN HOSPITAL ASSOCIATION. THESE HOSPITALS PROVIDE NON-SPECIALIZED CARE, AND THE MAJORITY OF THEIR PATIENTS STAY FOR FEWER THAN 30 DAYS.

NON-GENERAL HOSPITALS:

NON-GENERAL HOSPITALS ARE THOSE WHERE THE MAJORITY OF PATIENTS STAY MORE THAN 30 DAYS AND THOSE WHICH PROVIDE SPECIALIZED CARE; EXAMPLES ARE:

HOSPITAL UNIT OF AN INSTITUTION (PRISON, COLLEGE, MENTAL RETARDATION SCHOOL, PSYCHIATRIC, TUBERCULOSIS AND OTHER RESPIRATORY DISEASES, NARCOTIC ADDICTION, GERIATRIC, MATERNITY, REHABILITATION, ORTHOPEDIC, CHRONIC DISEASES AND OTHER SPECIALTIES). SERVICES ALSO COVER CHILDREN'S GENERAL HOSPITALS AND CHILDREN'S HOSPITAL UNIT OF AN INSTITUTION (PSYCHIATRIC, TUBERCULOSIS AND OTHER RESPIRATORY DISEASES, REHABILITATION, ORTHOPEDIC, CHRONIC DISEASES, MENTAL RETARDATION, EPILEPSY, AND ALCOHOLISM).

9-B) HOSPITAL EMPLOYMENT:

PERSONNEL COVERED ARE: M.D.'S, D.D.'S, INTERNS AND RESIDENTS, OTHER TRAINEES, R.N.'S, L.P.N.'S EMPLOYED IN GENERAL HOSPITALS AND IN NON-GENERAL HOSPITALS. IT IS SHOWN IN FULL TIME EQUIVALENTS (PART TIME IS COMPUTED AS 1/2 FULL TIME). THE "INTERN AND RESIDENT" FIGURE SHOWS THE NUMBER ACTUALLY EMPLOYED WHETHER OR NOT THE TRAINING PROGRAM IS ACCREDITED BY THE A.M.A. MOST OF THE NON-ACCREDITED POSITIONS FILLED ARE BY FOREIGN MEDICAL GRADUATES WHO ARE MORE EMPLOYED THAN STUDENTS. HOWEVER, WHERE BOTH EMPLOYEES AND A.M.A. ACCREDITED INTERNS AND RESIDENT POSITIONS ARE REPORTED, THE EMPLOYMENT OFTEN SHOWS WHAT PROPORTION OF THE OFFERED POSITIONS ARE UNFILLED.

9-C) OTHER DATA

OUTPATIENT VISITS:

OUTPATIENT UTILIZATION CONSISTS OF EMERGENCY VISITS, CLINIC VISITS (ORGANIZED OUTPATIENT DEPT.), REFERRED PATIENT VISITS, AND TOTAL VISITS. THERE IS ALSO AN OUTPATIENT RENAL DIALYSIS FACILITY.

UTILIZATION:

THE UTILIZATION RATE IS THE RESULT OF DIVIDING THE TOTAL PATIENT DAYS BY THE PRODUCT OF 365 TIMES THE NUMBER OF BEDS. THIS DIFFERS FROM THE FIGURE PUBLISHED IN THE "JAHA GUIDE ISSUE" IN THAT THE LATTER INCLUDES AN ADJUSTMENT FOR THE NUMBER OF OUTPATIENTS SEEN.

SERVICES (OR FACILITIES):

THE SERVICES ARE THOSE REPORTED BY GENERAL HOSPITALS. IN THE JAHA GUIDE ISSUE, THEY ARE TERMED "FACILITIES". UNFORTUNATELY, IN THE PAST, THE HOSPITALS HAVE TENDED TO CLAIM SUBSTANTIALLY MORE IN SERVICE THAN CAN BE REASONABLY ATTRIBUTED TO THEIR FACILITIES. WITH THE WORDING OF THE 1970 HOSPITAL SURVEY, HOWEVER, THIS PROBLEM SHOULD BE MINIMIZED. THE SERVICES SECTION OF THE QUESTIONNAIRE IS AS FOLLOWS:

POST-OP RECOVERY ROOM	(A)	-- QUESTIONAIRE CODE
INTENSIVE CARE UNIT	(B)	
INTENSIVE CARDIAC CARE UNIT	(C)	
OPEN HEART SURGERY FACILITIES	(D)	
FT REGISTERED PHARMACIST	(E)	
PT REGISTERED PHARMACIST	(F)	
X-RAY THERAPY	(G)	
COBALT THERAPY	(H)	
RADIUM THERAPY	(I)	
RADIOISOTOPE FACILITY	(J)	
HISTOPATHOLOGY LAB	(K)	
ORGAN BANK	(L)	
BLOOD BANK	(M)	
ELECTROENCEPHALOGRAPHY	(N)	
INHALATION THERAPY DEPT	(O)	
PREMATURE NURSERY	(P)	
SELF CARE UNIT	(Q)	
EXTENDED CARE UNIT	(R)	
INPATIENT RENAL DIALYSIS	(S)	
OUTPATIENT RENAL DIALYSIS	(T)	
PHYSICAL THERAPY DEPT	(U)	
OCCUPATIONAL THERAPY DEPT	(V)	
REHABILIATION INPATIENT UNIT	(W)	
REHABILITATION OUTPATIENT	(X)	
PSYCHIATRIC INPATIENT	(Y)	
PSYCHIATRIC OUTPATIENT UNIT	(Z)	
PSYCHIATRIC PART HOSP PROGRAM	(1)	
PSYCHIATRIC EMERGENCY SERVICES	(2)	
PSYCHIATRIC FOSTER & HOME CARE	(3)	
SOCIAL WORK DEPT	(4)	
FAMILY PLANNING SERVICE	(5)	
HOME CARE DEPT	(6)	
HOSPITAL AUXILIARY	(7)	
ORGANIZED OUTPATIENT DEPT	(8)	
EMERGENCY SERVICE LEVEL	(9)	- (12)

10. VITAL STATISTICS DATA

VITAL STATISTICS DATA ON TOTAL MORTALITY BY PLACE OF RESIDENCE, INFANT MORTALITY - UNDER ONE YEAR OLD, AND MORTALITY FROM INFECTIOUS DISEASES WAS OBTAINED FROM THE 1968 NCHS MORTALITY TAPE.

NATALITY DATA WHICH INCLUDES TOTAL BIRTHS BY RESIDENCE AND BIRTHS IN HOSPITALS WAS OBTAINED FROM THE 1968 NCHS NATALITY TAPE.

11. CHANGES IN DEFINITION IN PAST YEAR

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